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ABSTRACT

This guide is the result of deliberations at a national conference involving representatives of business, industry, labor, education, government, and the community, and at regional clinics which followed the conference. Chapter headings are: (1) Cooperative Vocational Education and What It Will Do, (2) What Form and Type Is Best for a Specific School? (3) Meeting Student and Manpower Needs Through Cooperative Vocational Education, (4) Supervising the Participation of Employers, (5) Establishing Administrative Relationships, (6) Staffing Cooperative Vocational Education Programs, and (7) Maintaining and Improving Cooperative Vocational Education. Appended are checklists for establishing programs for use of school administrators, principals, and coordinators, as well as a checklist of recommended practices for the use of coordinators. (JK)

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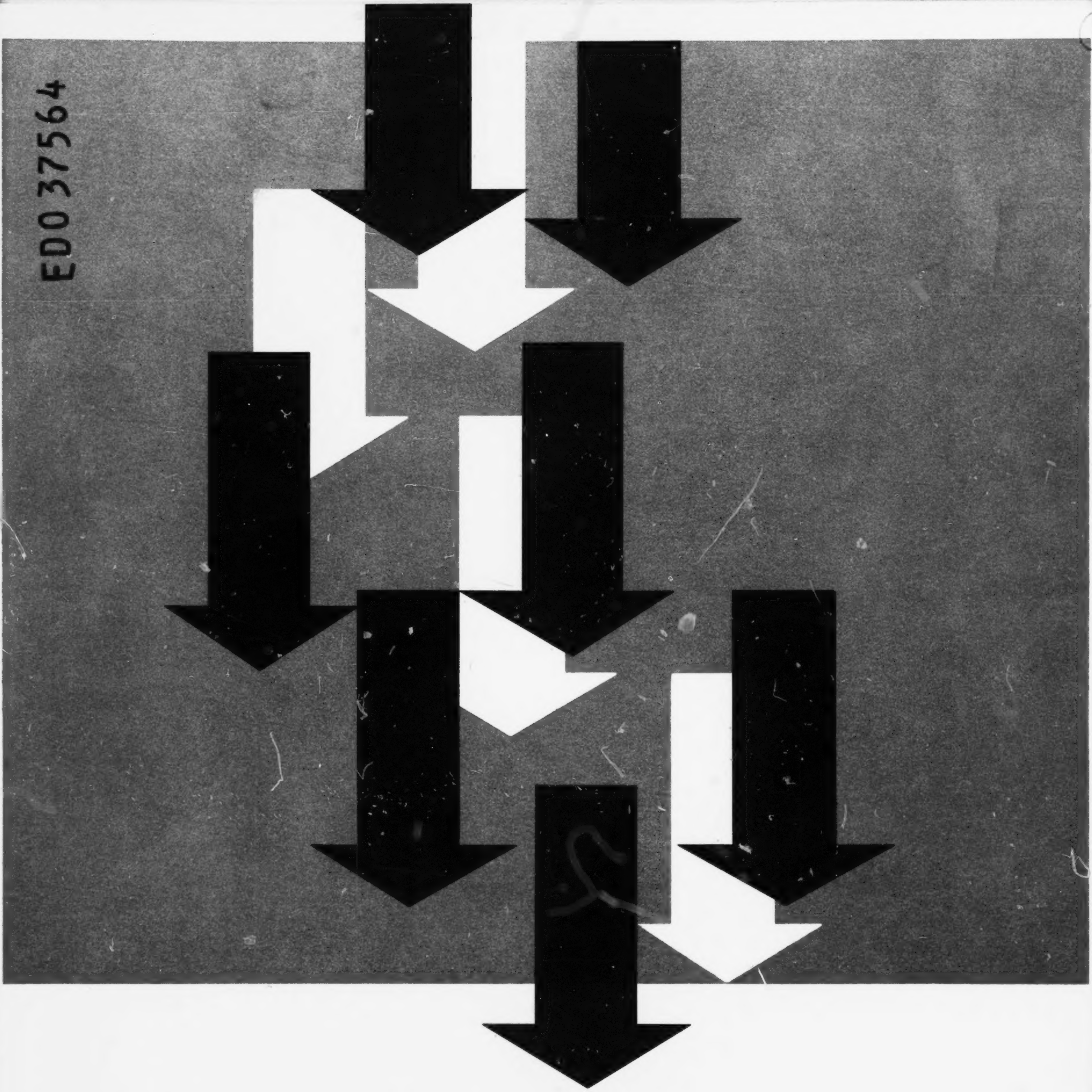

A Guide for

Cooperative Vocational Education

College of Education
Division of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota
September, 1969

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GUIDE FOR

Cooperative Vocational Education

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A GUIDE FOR COOPERATIVE VOCATIONAL EDUCATION

College of Education
Division of Vocational and Technical Education

University of Minnesota
Minneapolis, Minnesota
September, 1969

This publication was prepared pursuant to a grant with the Office of Education, U.S. Department of Health, Education and Welfare. Points of view or opinions were developed at a National Conference in Minneapolis and nine Regional Clinics. They do not, therefore, necessarily represent official Office of Education position or policy.

Developed pursuant to a contract with the
Office of Education
Division of Vocational and Technical Education

by the

College of Education
Division of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota

1969

FOREWORD

This guide is the product of the deliberations of several groups of people having responsibilities for cooperative education. The first was about 200 people who attended a national conference on cooperative vocational education held in Minneapolis on February 26-28, 1969. This group of selected participants represented business, industry, labor, education, government and community interests from across the nation. The purpose was to bring together people with a wide range of backgrounds to focus on the extension and improvement of cooperative vocational education.

The National Conference participants were divided into ten task forces which were led by outstanding vocational educators, half of whom were from locations other than the Upper Midwest. All participants and staff were informed and stimulated by six exceptionally able speakers who were followed by symposium members speaking on selected aspects of the morning or afternoon topic as the case might be. We are very grateful to these speakers: Honorable Roman C. Pucinski, Congressman from Illinois; Dr. Henry Borow, Professor of Psychological Studies and Counselor Education, University of Minnesota; Dr. John A. Sessions, Public Education Specialist, AFL-CIO, Washington, D.C.; Mr. Robert Guelich, Vice-President of Public Relations, Montgomery Ward and Company; Dr. H. I. Willett, Superintendent of Richmond, Virginia Public Schools; and Mr. Marvin J. Feldman, Program Officer, Ford Foundation and National Advisory Council Member. A report of the entire conference proceedings was prepared and 3,500 copies were distributed to the nine U.S. Office of Education regional offices.

Each of the National Conference task force leaders presented a prepared summary paper at one of the nine regional clinics held in April. This leader and a member of the contract staff met with the discussion groups following the presentation for the purpose of identifying regional concerns and to answer questions about the National Conference proceedings and findings. Recorders were selected and their notes became part of the source material for this guide.

The task force leaders met in Minneapolis on May 12 to make recommendations for this final document. They reacted to a tentative content outline prepared by members of the contract staff and gave suggestions on the treatment and format of the content material. Even though the consumers of the material were deemed to be a heterogeneous group composed largely of educational administrators, who frequently do not take time to study lengthy publications, and vocational educators, who want explicit information in order to implement cooperative vocational education, it was decided to attempt to please both interest groups. Hopefully, this will be achieved through highlighting the essential concepts at the beginning of each major topic by blocking in a section which summarizes the important principles and practices and following with descriptive copy of interest to program implementers.

The contract staff is deeply indebted to Mr. Edwin L. Nelson, Senior Program Officer, Work Experience Education, U.S. Office of Education, for his support in this project. Were it not for his guidance and assistance, this document would not have been possible. We are also grateful to other members of the Office of Education staff, Mr. Donald Snodgrass, Miss Mary Marks, and those who participated in the planning sessions.

Special thanks are extended to our task force leaders who performed a crucial role in making this publication viable. They are: J. Dudley Dawson, Consultant with the National Commission for Cooperative Education; Eugene L. Dorr, Assistant State Director of Vocational Education for the State of Arizona; Vern C. Gillmore, President of the California Association of Work Experience Educators; John D. Lee, Indiana State Supervisor of

Business and Office Education; Duane R. Lund, Superintendent of Schools, Staples, Minnesota; Jerome Moss, Professor of Industrial Education, University of Minnesota; Charles F. Nichols, Principal, Minneapolis Work Opportunity Center and member of the National Advisory Council on Vocational Education; Gordon I. Swanson, Professor of Agricultural Education, University of Minnesota; Elizabeth Simpson, Professor of Home Economics Education, University of Illinois; and Emma B. Whiteford, Professor of Home Economics Education, University of Minnesota. This dedicated group gave willingly and generously of its time and provided a balance of viewpoints needed to produce an acceptable treatment of this topic.

Finally, the conference staff wishes to thank the College of Education and the Central Administration of the University of Minnesota for making this conference possible. We wish to thank President Malcolm Moos in particular for his very appropriate and gracious welcome at the National Conference which set the tone for what followed throughout the project.

Warren G. Meyer
Mary K. Klaurens
Richard D. Ashmun

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Chapter I

COOPERATIVE VOCATIONAL EDUCATION AND WHAT IT WILL DO

This bulletin was prepared primarily for persons concerned with planning and implementing cooperative vocational education by local education agencies under the provisions of the Vocational Education Amendments of 1968. The term "local education agency," which appears frequently in this document, applies to local boards of education having control of public schools and institutions such as elementary and secondary schools, junior and community colleges, and area vocational-technical schools[1]. Hopefully, it will also be helpful to other educators and laymen who are concerned with the cooperative programs in vocational education.

In deference to the primary group of contemplated readers, the material presented here is organized in such a way that a person or group may refer to this bulletin for information that is likely to be required in making an application for approval of a local plan of vocational education. An attempt has been made to provide a discussion of items specifically called for in the State Plan Guide, particularly those items dealing with the submittal and review of applications[2].

Chapters I and II relate primarily to the basic information about cooperative vocational education that is essential in making decisions in answer to two questions: "Whom should a given local education agency serve, both initially and over a specific period of time?" and "What should be the goals and principal characteristics of the offering(s)?"

Since administrators and practitioners differ in the amount of detailed information needed to carry out their responsibilities, the bare essentials have been placed in a box at the beginning of each major topic. Hence, local education agency administrators may read the items in the box only and refer to the succeeding copy if one of the items merits further investigation. On the other hand, most practitioners may be expected to read both the material in the boxes and the discussion which follows.

THE ADVANTAGES OF COOPERATIVE VOCATIONAL EDUCATION

Program planners will benefit from a brief treatment of the values of cooperative vocational education because of the need for this type of information in preparing program proposals and for referral purposes throughout program planning. Functional knowledge of these values also aids the practitioner in daily decision-making.

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[1] *Vocational Education Amendments of 1968, Regulations for State Plan Programs,* 102.3(q).

[2] *Guide for the Development of a State Plan for the Administration of Vocational Education under the Vocational Education Amendments of 1968,* Part I, Section 9.0.

Advantages of Cooperative Vocational Education

1. Cooperative vocational education probably provides the most relevant curriculum and instruction for students with vocational goals because it is designed to respond to student's needs and occupational requirements.

2. Cooperative vocational education provides for application of most vocational learnings because there is almost immediate opportunity for try-out in real-life situations.

3. Cooperative vocational education provides balanced vocational preparation including manipulative and technical skills. It is sensitive to occupational adjustment and career development needs because of the continuous feed-back from training sponsors and others.

4. Cooperative vocational education is well-equipped to prepare students with wide variances in abilities for a broad range of occupational fields. Its only limitation is the number of potential training stations available in an occupational field.

5. Training more students than can be employed does not occur in cooperative vocational education because participation is limited to students who can be placed in cooperating training stations. There are other manpower control features such as the occupational survey and advisory committee.

6. Close community relations is a necessity in cooperative vocational education because of its dependence on the community for job placement and on-the-job instruction.

Greater Relevance of Curriculum and Instruction

Without doubt, the greatest current concern about education in general is the relevance of curriculum and instruction to the needs and interests of present-day youth. Cooperative vocational education has some built-in features that almost insure relevant instruction when properly used. A few of the more salient points relating to the relevance of cooperative education are given below. In relating these claims, the assumption is made that the definition of cooperative vocational education found in the 1968 Act holds.

1. Students are placed on jobs that are in harmony with their abilities and interests.

2. Each student follows a plan of on-the-job experiences which is based on occupational requirements and individual student needs.

3. Students have the opportunity to learn skills on real jobs under actual working conditions.

4. Classroom instruction, on-the-job training, and student club activities are articulated in the development of clearly identified competencies.

5. Students have an active role in the choice of content and methods because of their unique experiences which incite them to seek education for their developing personal needs.
6. The teacher is not the sole authority. His teachings are supplemented with the practices and ideas of employers and employees of the occupational environment.
7. Students can better evaluate the contribution of general and vocational education in terms of their own needs and aspirations.
8. Students are able to identify with the world of work in a meaningful way.
9. Students encounter daily situations in an adult environment which cause them to examine their values and reappraise their potential in occupational and social situations.
10. Students receive the guidance of trained teacher-coordinators who have been 'through the mill' in the occupational field when making vital vocational decisions.
11. Students make the transition from school to work gradually under the skilled guidance of a teacher-coordinator, giving them time to comprehend the significance of the learning situation and the world of work.
12. Students receive direct on-the-job contact with professionals whose responsibility it is to stay up-to-date in their profession.
13. Curriculum revision is more rapidly reflective of current occupational requirements.
14. Cooperative vocational education enables the student to relate education to his occupational interests at a period in life when it is natural for him to look outside the school for learning and earning.
15. Cooperative education may provide the most influential means of coordinating the home, the school, and the world of work in behalf of the student.

Better Application of Learning

One of the most visible values of cooperative vocational eduation is the opportunity for better application of classroom learning to a real-life test. This value is particularly important in the development of the capabilities needed for good occupational adjustment. Simulated occupational environments rarely provide a laboratory of real-life employers and employees and seldom one with real-life customers or clients. Occupations vary widely in their reliance on job experience for learning the required technical competencies. Evidence concerning the better application of learning in cooperative vocational education follows:

1. Students are able almost immediately to test their occupational learning voluntarily and independently in a real-life situation.
2. The job usually functions as a learning laboratory in which structured assignments that do not interfere with production are carried out on the job. When they do interfere, arrangements may be made for special instruction outside of working hours.

3. Students apply their learning in a variety of job situations and return to the classroom for analysis and group discussions. Thus, they understand better and appreciate the difference in practices among employing organizations. Such variances in applications would not be possible in almost any simulated environment.
4. Students acquire a better understanding of problem-solving and the scientific method. Problems arise on the job or in school; they are identified; they are investigated. Alternatives are explored and some are chosen. They are tried out on the job and observations are made. The action succeeds or fails and the cycle is dropped or repeated.
5. Well chosen training stations become rich learning resources and usually furnish more valid information than is available to learners through other means. Carefully prepared on-the-job training sponsors take a personal interest in the student's development and function as excellent laboratory instructors.
6. Under guided experiences on their jobs, and sometimes in unplanned situations, students are led to appreciate the values of general education.
7. The total physical and psychological job environment adds materially to the laboratory and teaching facilities available.
8. Frequent periodic applications of classroom learning to an employment situation remove artificial barriers to learning.

Improved Balance in Vocational Capabilities

Vocational education has done a very commendable job of developing technical skills and knowledge in the traditional vocational fields. The same cannot be said of occupational adjustment and career development; studies show that a major portion of jobs are lost for reasons other than incompetency in the technical skills and also that occupational tenure among vocational education graduates leaves much to be desired. Many vocational educators attribute this phenomenon to an inadequate training environment in the traditional vocational education setting. A few cogent points regarding balanced vocational capabilities follow.

1. Properly designed occupational experience provides opportunities for exploration of the three major vocational capability areas, (1) technical, (2) occupational adjustment, and (3) career development, through the employing organization's physical facilities and its human environment.
2. First-hand guidance information is available for the asking at the job training site. Chances are that, when properly solicited, such information will be more complete and accurate than could normally be communicated because of the bond between the student and the employing firm or organization.
3. Teacher-coordinators are likely to be more sensitive to the need for balanced instructional content than other vocational teachers because of the continuous feedback from training sponsors and other employees on the behavior of the student.

4. Continuous dialogue among the coordinator, the employer and the student provides ample opportunities for a balanced viewpoint in formulating the student's individual curriculum.
5. The coordinator's regular contacts with employers, employees, and the student facilitate helping the student personally bridge the generation gap as well as master the technical capabilities.
6. As wage earners, students develop an appreciation and respect for work and are aided in obtaining worthwhile jobs.
7. Students are able to observe and assess the importance of personal traits so necessary for employment: punctuality, dress, regular attendance, and responsibility for completing assigned tasks.
8. Cooperative vocational education provides many students with their most useful contacts with society outside the home.
9. Cooperative vocational education helps students clarify relationships between education and employment and earnings.
10. Cooperative vocational education adds breadth and depth of meaning to the student's studies.
11. Work periods offer opportunities for independent exploration of an environment providing for new knowledge, practices, and experiences.

Extension of Training to Additional Occupations and Students

Even with programmed instruction and computerized practices, the schools cannot provide adequately in the school alone for the multitude of occupations which compose our labor force. Even if the technical training could be automated, it would not be possible to provide training in the personal and social capabilities needed in large numbers of behavioral-science-based occupations. In many occupations, however, cooperative vocational education can furnish the essential elements that complement classroom work and provide a reasonable training program. Some of the most prevalent points relating to this value of cooperative education are as follows:

1. Cooperative education is well-equipped to prepare students for new and emerging careers with some assurance that they will be gainfully employed.
2. Cooperative vocational education is relatively well-equipped to accommodate students of a wide range of ability as compared to vocational education offered without occupational experience.
3. Cooperative vocational education is better equipped to provide for the needs of occupations which draw on more than one discipline than is vocational education which is limited to classroom instruction.
4. In these times of rising costs, educational institutions can utilize their staff and facilities much more effectively by shifting part of the costs of education to the employing community. This enables the school to provide for the expansion of occupational training.

5. Cooperative vocational education is a significant means of aiding low-income students.
6. Cooperative vocational education enables some students to stay in school who otherwise would drop out to seek employment.

Built-In Manpower Training Control

Congress has great concern for balancing the demand and supply of manpower. Reducing unemployment has been one of its major goals during the 1960's. Though the record is favorable in recent years, Congressional concern remains. Hence, the manpower control feature inherent in cooperative vocational education appealed to Congress and will appeal to other groups dealing with manpower problems. Some of these features may be described as follows:

1. The number of persons training for an occupational field is limited to the number of available training stations (employing firms) unless an alternating plan is used in which two students hold one job.
2. Advisory committees representing employers and employees are an essential feature of cooperative vocational education. These committees counsel the school on the manpower supply and demand problem.
3. Cooperative vocational education should be started only after adequate employment, demographic and other essential data have been collected, analyzed and a favorable report is made.
4. Cooperative vocational education promises to have a stabilizing effect on the labor market because of its occupational tryout and guidance features.
5. Cooperative vocational education is equipped to help disadvantaged and handicapped youth become well-adjusted members of the labor force in quantities that can be absorbed.
6. Cooperative vocational education consistently yields high placement records, high employment stability, and high job satisfaction.

Closer Relationship with the Community

Part G of the 1968 Amendments stresses the use of the employment service, employers, labor and other community agencies and groups in identifying training opportunities. Extension of cooperative vocational education into new occupational areas and including disadvantaged and handicapped students, both in and outside of school, thrusts new responsibilities on the community, and calls for new relationships between the school and community groups. These ties serve to strengthen the program. Major contributions are as follows:

1. A closer partnership between the schools and the occupational world is necessary in order to maintain the proper relevance of training and the basic subjects to support the occupational training.

2. In cooperative vocational education the schools and the employing community are brought together on mutual educational problems that are within their power to understand and handle.
3. When employers engage in vocational education in their stores, shops and offices, an appreciation of the school's problems is inevitable. This phenomenon holds for the school's understanding of employers' problems as well.
4. As the program expands to accommodate new groups of students, the need for wider community support grows and new groups are involved which introduce fresh perspectives on established policies and procedures.
5. Student achievement is accelerated when academic and employment environments are combined. The environmental experience in one supports and influences the experiences provided in the other.
6. Business and industry spokesmen, who participate with youth in cooperative education, may provide the community with vital understandings about education when they speak to civic clubs or in other ways to participate in community activities.
7. An excellent source of future employees may be developed by business, industry, and government through becoming involved with educators who are developing young people via cooperative education.
8. Employers and students have a chance for a trial acquaintance before full-time employment.
9. The two-way working relationship with the wider community adds quality and distinctiveness to the school as a whole.

Improved Vocational Guidance

Opportunities for improved vocational guidance abound during the period of cooperative employment when students can engage in occupational tryouts to see whether or not they are suited for the type of career in which they are gaining experience. Opportunities to investigate the way of life of persons engaged in an occupational field are much more favorable to a cooperative student than to students not in the program. Among the vocational guidance advantages and opportunities of cooperative vocational education are the following:

1. Cooperative vocational education provides career guidance in making suitable choices of a field or work. Students may receive the help of teacher-coordinators who have had successful occupational experience in addition to teaching, of regular vocational counselors, of employers, and co-workers at their training stations.
2. Students who have the opportunities afforded in cooperative education are provided early occupational experiences which are vital in making immediate and long-range career decisions.

3. Cooperative vocational education encourages students to finish high school and to enter employment or continue into higher education.
4. Students may try out a variety of work situations under trained teacher-coordinators as cooperative students before they leave school.
5. The ability to get and hold a job helps the young person bridge the gap between school and work. Alternated periods of school and work under guidance allow for gradual induction into the work world.
6. Cooperative vocational education provides the student with a wider range of possibilities for employment after graduation.

COOPERATIVE VOCATIONAL EDUCATION DEFINED

Inasmuch as there are several types and many forms of cooperative education and the term means many different things to people, it seems essential to good communication that *cooperative vocational education* be defined here as it will be used in this publication. Much misunderstanding will be averted if readers are able to identify the various types of "education and work" programs and if they understand the definition of cooperative vocational education that appears in the Vocational Education Amendments of 1968.

Definition of Cooperative Vocational Education

Cooperative vocational education is defined in Part G of the Vocational Education Amendments of 1968 as follows:

> ". . . a program of vocational education for persons who, through a cooperative arrangement between the school and employers, receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field, but these two experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his employability. Work periods and school attendance may be on alternate half-days, full-days, weeks, or other period of time in fulfilling the cooperative work-study (vocational education) program."[3]

The attention of educational administrators and vocational educators is called to the fact that the definition is given for purposes of Part G, and that this is the only definition of cooperative vocational education in the Act per se.

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[3] There is an inconsistency in the terminology in the Act in that Part G is titled "Cooperative Vocational Education Programs" and the definition in Section 175 refers to "cooperative work-study programs." It was decided by the task force that the term "work-study" should be dropped and the term "cooperative vocational education" be used in order to avoid confusion between the programs described in Part G and "Part H – Work-Study Programs for Vocational Education Students."

Definition of Cooperative Vocational Education

1. Cooperative education is an arrangement for bringing relevancy to formal instruction through alternating employment in the community with classroom instruction. The term encompasses plans employing a wide variety of practices, policies and procedures.
2. The legal definition of cooperative vocational education contains the minimal requirements for reimbursement for this type of education which equals or exceeds the Federal requirements.
3. The legal definition contains three criteria for cooperative vocational education: (1) students must receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field, (2) these two experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his employability, and (3) work periods and school attendance may be on alternate half-days, full days, weeks or other periods of time.
4. Cooperative vocational education may be funded under two parts of the Amendments of 1968: Part B – State Vocational Education Programs, and Part G – Cooperative Vocational Education Programs. The purpose of Part G is to aid the states in expanding cooperative vocational education to include students in areas with high rates of school dropouts and youth unemployment.
5. Since there are alternative objectives for local cooperative vocational education, some of which may conflict in program operation, choices should be made during the planning stage.
6. In selecting program objectives, local planners should be fully aware of the vocational attitudes of prospective students and the range of student attitudes toward school.
7. Vocational planners are strongly encouraged to heed the needs of special groups of students such as those with academic, cultural, and other handicaps.

It should be clearly understood that the *regularly reimbursed* cooperative vocational education programs will be funded under Part B of the Act. Hence, each State may formulate its own requirements for Federally assisted programs within the language of Parts B and G and the definition of cooperative vocational education in the *Regulations for State Plan Programs.*[4]

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[4] U.S. Office of Education, Bureau of Adult, Vocational & Library Programs, *Vocational Education Amendments of 1968 Regulations for State Plan Programs,* April, 1969, 142 p. Cooperative vocational education is defined in Sec. 102.3(g) in the same words as Part G.

Vocation Education Amendments of 1968

Comparative Analysis of Cooperative Education Programs and Work-Study Program

Part B	Part G	Part H
State Vocational Education Programs	**Cooperative Vocational Education Programs**	**Work-Study Programs for Vocational Education Students**
1. Money appropriated under Part B and allotted to the states may be expended for cooperative education programs	1. Money appropriated under Part G and allotted to the States shall be expended for developing new programs of cooperative education	1. Money appropriated under Part H and allotted to the States shall be expended for work-study programs
2. Purpose * To provide on-the-job work experience related to the students course of study and chosen occupation	2. Purpose * To provide on-the-job work experience related to the student's course of study and chosen occupation	2. Purpose * To provide financial assistance to students who are in need of earnings from employment to commence or continue their vocational education program
3. Students Served * Individuals who desire and need such education and training in all communities of the State	3. Students Served * Individuals who desire and need such education and training in all communities of the State * *Priority is given to areas of high rates of school dropouts and youth unemployment*	3. Students Served * Economically disadvantaged full-time vocational education students

Part B	**Part G**	**Part H**
State Vocational Education Programs	**Cooperative Vocational Education Programs**	**Work-Study Programs for Vocational Education Students**
4. Uses of Funds * Program operation and ancillary services	4. Uses of Funds * Programs operation and ancillary services * *Reimbursement of added training cost to employers, when necessary* * *Payment for certain services or unusual costs to students while in cooperative training*	4. Uses of Funds * Compensation of students employed * Development and administration of program
5. Federal Portion of Support * Based upon Statewide matching (50/50) for all basic grant vocational education programs. Application of State criteria for allocation of funds determines level of assistance	5. Federal Portion of Support * *All or part (100%)*	5. Federal Portion of Support * 80%
6. Instruction * In-school vocational instruction related to occupational field and training job	6. Instruction * In-school vocational instruction related to occupational field and training job	6. Instruction * In-school vocational instruction not necessarily related to the job
7. Work Periods * Alternate half days, full days, weeks, or other periods of time. (Number of hours of work generally equal the number of hours spent in school)	7. Work Periods * Alternate half days, full days, weeks, or other periods of time. *(Number of hours of work need not equal the number of hours spent in school)*	7. Work Periods * Maximum of 15 hours per week while attending school

Part B	Part G	Part H
State Vocational Education Programs	**Cooperative Vocational Education Programs**	**Work-Study Programs for Vocational Education Students**
8. Wage Payments * Regular wages established for the occupational field * Usually at least minimum wage or student-learner rate established by Department of Labor * Wages paid by employer	8. Wage Payments * Regular wages established for the occupational field * Usually at least minimum wage or student-learner rate established by Department of Labor * Wages paid by employer	8. Wage Payments * $45 per month, $350 per academic year or in certain cases $60 per month, $500 per academic year * Public funds are used for compensation
9. Age Limitations * Minimum age 14 as per Child Labor Laws	9. Age Limitations * Minimum age 14 as per Child Labor Laws	9. Age Limitations * 15 through 20 years of age
10. Eligible Employers * Public or private	10. Eligible Employers * Public or private	10. Eligible Employers * Limited to public, non-profit employers
11. Administration * Administered by the State or local educational agencies under supervision of the State Board for Vocational Education in accordance with State Plan provisions	11. Administration * Administered by the State or local educational agencies under supervision of the State Board for Vocational Education in accordance with State Plan provisions	11. Administration * Administered by the State or local educational agencies under supervision of the State Board for Vocational Education in accordance with State Plan provisions

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Vocational program-planners should also be mindful of the possibilities of designing programs combining work and education under "Part D – Exemplary Programs and Projects" and "Part H – Work-Study Programs for Vocational Education Students." These sections make possible a wide variety of work-related programs. The chart on page 10 titled "Comparative Analysis of Cooperative Education Programs and Work-Study Program" highlights the essential features of cooperative vocational programs under Part B, those under Part G and the Work-Study Program under Part H. Programmatic features of exemplary programs were too diverse to be included in the chart.

Purpose of Federal Assistance for Cooperative Education

Congress was explicit in relating the nature of the type of cooperative vocational education it wished to stimulate, in "Findings and Purpose," Part G of the Act.

> "The Congress finds that cooperative work-study (Vocational Education) programs offer many advantages in preparing young people for employment. Through such programs, a meaningful work experience is combined with formal education enabling students to acquire knowledge, skills and appropriate attitudes. Such programs remove the artificial barriers which separate work and education and, by involving educators with employers, create interaction whereby the needs and problems of both are made known. Such interaction makes it possible for occupational curricula to be revised to reflect current needs in various occupations."

Likewise, Congress was explicit in communicating its purposes in the same section, as follows:

> "It is the purpose of this part to assist the State to expand cooperative work-study (Vocational Education) programs by providing financial assistance for personnel to coordinate such programs, and to provide instruction related to the work experience; to reimburse employers when necessary for certain added costs incurred in providing on-the-job training through work experience; and to pay costs for certain services, such as transportation of students or other unusual costs that the individual students may not reasonably be expected to assume while pursuing a cooperative work-study (Vocational Education) program."

Cooperative vocational education has an outstanding record of helping young people bridge the gap between school life and the work world. There are numerous illustrations of how immature young people made successful transitions from school to jobs with the help of cooperative vocational education programs. Some of the more spectacular stories involve students whom the schools had previously failed to challenge. Research shows that cooperative vocational education program graduates have the lowest youth unemployment rate in the labor force. Facts like these have stimulated great interest in the potential contributions that cooperative education can make in solving the problems of assimilating youth into the mainstream of adult society.

The 90th Congress apparently thought so highly of the record of cooperative vocational education in preparing the types of students currently enrolled that it earmarked an authorization of funds so that more students could participate, particularly those in areas with high rates of school drop-outs and youth unemployment. The obvious underlying assumption, reinforced by the definition of cooperative education in Part G of the Act, is that *the same type or similarly designed programs, policies and procedures would be equally effective with all types of students;* an assumption that remains to be proved.

Selection of Local Program Purposes

In spite of the many assets of cooperative vocational education, unfortunately a program has not been designed which will encompass all vocational education needs simultaneously. There are many somewhat conflicting purposes and expectations for cooperative vocational education held by individuals and groups which may cause dissatisfaction later unless choices are made at the outset of planning. It is important that the selected purposes are well understood by all the parties involved – students, the teacher-coordinator, parents, participating employers, school administrators, faculty and counselors – because their inputs will vary with their concept of what the program is to achieve. There are at least two sets of considerations from which choices should be made – the vocational training continuum and the school attitude continuum:

The Vocational Attitude Continuum. This set of cumulative purposes ranges from non-vocational to entirely vocational purposes as follows:

1. To earn money in order to remain in school (non-vocational)
2. To develop the necessary social skills and work attitudes and habits necessary for job tenure or entry into other vocational training programs
3. To develop a viable career plan based on realistic self-appraisal and accurate occupational information
4. To develop a well-balanced combination of vocational capabilities that enable graduates to advance more rapidly in a satisfying career.

The Range of Students' Attitudes Toward School. There is a corresponding maturity range of educable youth and adults beginning with youth of approximately 14 years of age who are anti-social and school and work-alienated and who may or may not be enrolled in school, and extending to highly dedicated socially sensitive semi-professional oriented students as follows:

1. Young drop-outs and potential drop-outs who are not concerned with the rewards of earning a living
2. School drop-outs and potential drop-outs who realize the need for earning a living but who lack the understanding of social and vocational capabilities necessary for job tenure

3. School drop-outs and potential drop-outs who are willing to work and to develop the social and vocational capabilities necessary for job tenure but have unrealistic or poorly selected career goals
4. Regularly enrolled students at all educational levels who are conscious of the need for career plans and are pursuing understandings which will lead to satisfying careers
5. Regularly enrolled students at all educational levels who have well-chosen career plans.

Kinds of Students. In addition to the vocational attitudes and the attitudes of students toward school, there are a number of unique groups in a local community that should be considered for cooperative vocational education purposes. Some of these groups are (1) rural youth preparing for non-farm occupations, (2) inner-city youth with home backgrounds and ethnic factors which inhibit education and employment, (3) the physically handicapped, (4) slow learners and mentally retarded, (5) emotionally disturbed youth and adults, (6) juvenile delinquents, (7) college drop-outs, (8) college-oriented, and (9) academically or otherwise gifted or talented students.

SUMMARY

Through Congressional action, cooperative education becomes a priority in vocational education. It enhances occupational preparation by involving students in the real world of work. Cooperative education builds individual qualifications for subsequent full-time employment or advanced study. Other worthy outcomes are evident but subordinate to the primary purpose. For example, wage payments satisfy financial needs and thereby retain in school those students who might otherwise drop out. Students are provided vocational instruction closely related to their career goals and job situations. Through actual employment, career decisions are stabilized, adjusted, or redirected as a result of exposure to an employment area.

Chapter II

WHAT FORM AND TYPE IS BEST FOR A SPECIFIC SCHOOL?

Contrary to common opinion, there are great differences in the ways cooperative vocational education is organized and conducted. Early recognition of this circumstance, together with knowledge of the factors undergirding the differences among program types, will lead decision-makers to an appreciation of the need for careful planning and will in the long run expedite the planning process. Perhaps in no other educational plan is there any more critical need for careful consideration of all possible factors, because cooperative vocational education has a direct bearing on the school's image in the community, in addition to the welfare of the students.

Educational agencies operate with limited financial, physical and human resources which preclude unlimited vocational offerings, even with Federal and State support. Hence, there will be some constraints on the choice of student groups to be served. Conversely, employers have similar limitation on the resources which operate to the same end. Choices of student groups to be served may not be easy.

Prompt consideration of the characteristics of the student group(s) to be served is essential to effective and efficient program planning. Efforts on behalf of cooperative vocational education arise from several sources which may be divided roughly into two clusters, one stemming from educators, the other from employers and community groups. Initially each has somewhat different primary motives for entering into a cooperative arrangement. Soon, a common agreement on the program goals and expected student outcomes is usually reached, and both parties to the cooperative endeavor come to an understanding regarding the general characteristics of the student group(s) to be served.

The group or groups of students to be taught in a single section, or in several sections, of the program may fall within a feasible range on the vocational attitude continuum discussed on page 14. The same applies to the range of students' attitudes toward school and to other characteristics such as the types of students listed on page 15.

FACTORS DETERMINING FORM AND TYPE OF PROGRAM

Following an assessment of the needs of individuals to be served and an inventory of potential employment opportunities for cooperative vocational education students, several decisions concerning the nature of the program must be made which answer the following questions: (1) At what educational level(s) should cooperative vocational education be offered? (2) For which occupations should the training be given? (3) What are the characteristics of the prospective students that affect the organization of the program? (4) How long will it take to train the students to achieve the standards of competency desired? and (5) What should be the school and work schedule? Decisions of this type are usually difficult to change once the program is underway, hence nearly all alternatives should be examined and carefully considered.

Determining Form and Type of Program

1. Planners should consider the vocational education offerings of the entire school, the geographical area, and the State and plan in terms of program articulation and future program development. All educational levels should be taken into account before deciding to initiate a specific program in a particular school.
2. The occupations for which training is provided should be related to the existing career opportunities "susceptible to promotion and advancement." New and emerging occupations and those not included in the traditional cooperative education programs should be considered.
3. A single section of cooperative vocational education is inadequate in all but the smallest, most remote communities; several sections are needed so that the needs of large numbers and a wide variety of students can be served.
4. Classes in which the students have occupational goals within a vocational field are more effective than those composed of students with goals in a variety of fields. Classes of students with goals in a single field should be set up whenever possible, particularly at the higher grade levels.
5. At the junior high school and tenth grade level and in isolated rural areas, classes composed of students with a variety of occupational goals are feasible.
6. The length of a cooperative vocational education program should be determined in terms of the length of time it takes a student to develop a desired level of competency in his chosen field rather than by some arbitrary time standard.
7. There should be a common understanding on the part of planners and all parties having to do with program implementation about the characteristics and background of students to be included in a cooperative vocational education section (see outline on pages 20 and 21).

Determining the Educational Level

Rather than arbitrarily selecting an educational grade level for cooperative vocational education, the entire range of possibilities should be considered with possible future development and employment practices concerning specific occupational entry requirements in mind. In some situations, it may be possible to initiate more than one classroom section of students or to accommodate more than one grade level within a single section. Cooperative vocational education can be operated successfully in a number of institutions and at a wide range of educational levels including the following:

Non-graded programs – any level, any type of institution

Junior High School

- High School
  - Comprehensive high school
  - Vocational high school
- Post-secondary
  - Vocational-technical school
  - Community college
  - Junior college
  - College or University (non-baccalaureate degree)
- Collegiate (under the Higher Education Act)
  - Upper division (Baccalaureate)
  - Post-graduate

It may be advisable to establish entry level competencies for a particular section of cooperative vocational education without regard for an educational achievement level. For example, this may be necessary in order to accommodate individuals whose school records inadequately describe their readiness for occupational training.

During the initial planning period, the matter of articulation among units of the school system should be determined. Also, the matter of articulation with similar programs outside the school system and with a state-wide vocational educational program should be investigated. Rather than support two struggling cooperative vocational education programs in a geographic area, it may be advisable to agree on each school's assuming responsibility for training in certain occupational fields. In some rural areas of a state, vocational centers to which students are transported for related instruction may be feasible. In others, two or three school districts might be served on a rotation basis by one coordinator.

Determining Which Occupations to Include

The occupations for which training is provided should be related to existing career opportunities "susceptible to promotion and advancement."[1]

In the past, many interest groups or occupational fields were not served. Concerted efforts should be made now to develop programs which prepare youth for a variety of occupations and in proportion to distribution of employment and career opportunities. For example, the demand for service workers, for health occupations workers, for trained workers in communications and in public service exceeds the supply. To the traditional cooperative programs in distributive, office, and trade and industrial programs should be added programs that include agri-business occupations, health occupations, food service occupations, tourist industry occupations, home service occupations and others. A complete list of possible occupational fields for new programs can be found in *Vocational Education and Occupations.*[2]

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[1] Vocational Amendments of 1968, Part G, Sec. 173(a) (3).

[2] U.S. Office of Education, *Vocational Education and Occupations,* U.S. Government Printing Office, Washington, 1969. Catalog No. FS5,280:80061.

There are situations in which it is feasible and even advisable to organize a cooperative vocational education section of students who have career goals in a wide variety of occupations. For example, it may be pedagogically sound to start a junior high school or tenth grade section the main purpose of which is occupational exploration through work samplings and the refinement of occupational choice, or it may be economically appropriate to have a class for a wide variety of occupations in a small isolated community where there are neither enough students or training stations to support single occupational field groups. However, there seems to be general agreement that the more homogenous the occupational goals of students, the greater is the effectiveness of instruction and occupational experience.

Some school administrators are prone to favor the multi-occupational goal arrangement because of its seemingly administrative simplicity and cross-cultural potential. Unfortunately, the administrative advantages gained in the central office are usually lost at the operational level. The coordinator inherits a difficult task. It is not as easy to please simultaneously a highly diversified employer group as it is to please a group from the same field; the same condition applies to satisfying students' needs. One must realize that each occupational field represents a way of life of its own; the value systems, communications patterns, types of skills required, decision-making demands, human relations requirements, trade talk and jargon, sub-group structure and attitudes toward education are very different. Consensus can usually be achieved on only those things the members have in common; and the wider the variety of occupations represented, the less there is in common among them. Another operational problem associated with widely varied occupational goals of students is the difficulty experienced in obtaining suitable individual instructional materials and in directing their use. The multiplicity of forms of job study guides, which are to a large extent characterized by occupational fields, discourages many well-intentioned teacher-coordinators.

The benefits of interaction among students with different occupational interests may be achieved under an expert teacher-coordinator, but unfortunately at the risk of sacrificing other equally or more important vocational education outcomes. Time and energy of teachers and students consumed in making vocational instruction relevant to students with diverse occupational goals almost always result in the dilution of one or another important area of instruction. Usually occupationally related classroom instruction is de-emphasized; and as a result of lack of technical job competence, students are assigned to relatively simple job duties. Frequently, many of them lose interest in the career field, or are given responsibilities they cannot master without specific instruction. This usually results in frustration and questionable work attitudes.

The higher the educational level of the students, the more feasible it is to offer cooperative vocational education for specific occupational fields. In general practice, vocational educators seem to prefer homogeneous grouping by occupational fields whenever possible at the outset. Research is needed to provide answers to questions concerning the grouping of students in guidance-oriented cooperative vocational education offered at lower educational levels.

Identifying the Characteristics of Prospective Students

Irrespective of the educational agency's choice of the range of occupational goals of students to be accommodated, there should be common understanding among all of the parties involved concerning the characteristics of prospective students. Regardless of student ability levels, there should be agreement between the school and employers about the program entry criteria and standards. Employers must be aware of the characteristics of the students they employ. Information concerning prospective students in the categories listed below, plus additional information dictated by the special needs of the particular groups, will be helpful to program-planners. It is particularly important that counselors and coordinators agree on the characteristics of students who will be enrolled in specific sections of cooperative vocational education. The list below is a check-list only, and decision-makers may wish to add to or delete any of the items consistent with the established program objectives.

A. Academic ability
    - IQ range
    - Grade record
    - Creativity
    - Over- and under-achievers

B. Vocational interests
    - Student's career goals
    - Student's plans for future location of employment
    - Parental occupations
    - Grades in related field courses
    - Co-curricular and extra-curricular activities
    - Vocational interest test scores

C. Educational background and qualifications
    - Potential to communicate well
    - English grades, speech
    - Reading ability
    - Arithmetic ability
    - Curriculum followed to date
    - Pre-employment and prerequisite courses and grades

D. Emotional stability
    - Control of temper
    - Nervousness
    - Temperament
    - Others

E. Personality factors
    - Introvert-extrovert
    - Self-starter-lethargy
    - Sense of humor
    - Physical characteristics
    - General outlook on life

F. Character
    - Honesty
    - Loyalty
    - Morals
    - Ambitions

G. Health
    - General health
    - Stamina

H. Aptitudes and Talents
    - Art ability
    - Color perceptability
    - Manual dexterity
    - Clerical aptitudes

I. Parental Aspirations for their Child

J. Socio-economic Background
    - Socio-economic level of family
    - Occupations of parents and other relatives
    - Need to supplement family income
    - Career patterns of parents
    - Nature of home life

K. Vocational Maturity
    - Expressed interest in occupation
    - Work experience record
    - Willingness to assume responsibility
    - Record of attendance and punctuality
    - Work habits

Setting the Length of the Occupational Experience

The traditional length of cooperative vocational education programs has been one or two years of nine or ten months duration, with credit given in the usual Carnegie units. A more logical determination of length would be based on the time required to develop qualifications for a level of occupational performance in a student's chosen occupational field. Thus, the length of the program might vary with the occupational field for which the training is given, the ability and the entry skills (both personal and technical) of students who enroll in the program, and the level of competency desired when they leave. The technical skills required to become a good waitress may take a relatively short period of time to learn, whereas it may take considerably longer to train a chef. Thus, the length of programs may range from a minimum of three months to eighteen months or longer.

Determining the School-and-Work Schedule

The schedule should be flexible to allow students a variety of patterns for obtaining on-the-job training and completing the related instruction and necessary general education.

For some occupations, it might be desirable to provide more hours in school for skill training during the early stages of cooperative vocational education followed by more intensive on-the-job training toward the end of the program.

Concurrent related instruction is very desirable but should not be universally practiced, as many restrictions are imposed on seasonal occupations by this procedure. School districts should consider periods of alternation which have not been commonly used in the past, such as one or more weeks on the job followed by an equal amount of time in school. It may be possible to consider evening school classes for high school students so they can engage in training experiences during the day. Summer periods could also be utilized to provide job experiences for which the student would receive school credit. Training experiences should be during the time of day and at the time of year when the needed experiences are available in the training stations. However, care should be taken to abide by all State and Federal labor laws pertaining to the time of day for employment of minors.

Determining the Form of Cooperative Education

There are two common forms of cooperative vocational education based on the number of students holding a single job. In one form, known as "alternating," there are two students occupying each job; for example, one works in the morning and one in the afternoon, or the two may alternate school and work on a daily or weekly basis. In the non-alternating form, there is only one student per job. The non-alternating form is most commonly used in public secondary schools.

The most important advantage of the alternating form is that more students can be accommodated in employment. However, there is frequently a tendency for employers to favor one student over his alternate. Although the alternating form of cooperative vocational education may present some problems, it may be appropriate for situations in which there are a limited number of good training stations or the job requires one full-time person to complete a lengthy task.

The non-alternating form affords the advantages of relatively easy scheduling, continuity of class work and co-curricular activities, and easy correlation of classroom and job activities. It is particularly suited to enterprises that utilize part-time help during busy periods of the day.

DETERMINING THE EXPECTED STUDENT OUTCOMES

A recorded statement of anticipated student outcomes is one step in the total task of making instruction relevant to student and occupational needs. It also contributes to the establishment of consistent operating policies and to holding program-implementors responsible for behavioral results. The trend toward program evaluation based primarily on student performance outcomes rather than on program features is commendable, and a wholesome one for vocational education. The practice is probably here to stay.

Expected Student Outcomes

1. In order to achieve unity of purpose among those concerned with a local cooperative vocational education program and to maintain harmonious operation, a carefully planned statement of expected student outcomes is necessary.
2. A viable statement of expected student outcomes is based on data, information, and reason rather than on the emotionally tinged opinions of individuals and groups. These outcomes become the basis of program evaluation.
3. Three primary factors in formulating a statement of expected student outcomes are the needs of the students to be served, the requirements of the occupations for which training is pursued, and the capabilities of a good citizen-worker.
4. Because of the constraints on the school and cooperating employers the vocational education needs of all students cannot be served by cooperative education alone; choices among student groups to be served must be made. The needs and characteristics of the selected group(s) should be identified and studied in order to arrive at a statement of expected student outcomes.
5. The expected student outcomes of a cooperative vocational section representing one occupational field should not be copied for a section representing another field because of the inherent differences in emphasis on areas of occupational competency among the fields.
6. Factors which influence the expected student outcomes are: characteristics of the students to be served, educational achievement level of the program, availability of related course offerings, and the characteristics of the local community and individual school. Schools in low-income areas probably would strive for different outcomes than those in wealthy communities.
7. When preparing expected student outcomes, program-planners and implementors should consider the differences in occupational competency patterns *within* occupational fields.

Nature of the Task

Sufficient time invested in carefully identifying expected student outcomes is essential for effective program planning. Good program objectives are not derived from sentiment or whim or someone's pet peeve, but rather from facts, research, and sound advice. They are based on student needs, occupational requirements and behaviors of good citizen-workers. There are thousands of possible objectives in any occupational field, so choices must be made. No one cooperative vocational education program can be all things to all people.

An example of a relatively common program objective of a cooperative agri-business section in the area of career development might be, "to assist the student in refining his occupational goal." In order to achieve this program objective, a student would need to accomplish a number of expected student outcomes such as the "ability to weigh economic rewards against the psychological rewards in considering preferred occupations," and "ability to identify the compromises he may have to make in order to attain a chosen occupational goal."

Ambivalences about student outcomes lead to all sorts of problems from inception to evaluation of the program. One of the first relates to guidance of the students. In most cooperative programs, employability of students for the duration of the work period is required. Hence employers must understand at the outset who the students are, what they can do when first employed, and what they should learn on the job. This calls for measurement of expected student outcomes and appropriate guidance at several specified checkpoints. Another situation requiring identification of expected student outcomes arises in connection with student motivation. Expected student outcomes must be known and accepted by the student if he is to put forth his best efforts in school, on the job or in the community. These are but two of several functions of well selected, clearly identified, expected student outcomes.

Factors in Determining the Choice of Expected Student Outcomes

In arriving at expected student outcomes, program-planners will benefit from considering the following factors: (1) the characteristics of the group of students to be served, (2) the characteristics of the occupational field, (3) the educational achievement level(s) of the prospective students, (4) the availability of related offerings, including remedial, and (5) the characteristics of the community and school.

Characteristics of the Students to be Served. Regardless of the student group(s) to be served, the characteristics of the students must be considered when selecting expected student outcomes. No other factor is more important in this process than the students' needs, both those that are common to all group members and those that are individual. The subject of vocational competency areas as they relate to desired student outcomes will be discussed in Chapter III.

Characteristics of the Occupational Field. Program-planners are cautioned not to impose the expected student outcomes of a program in one vocational field on another. This mistake has caused some potentially good programs to falter. Although the vocational capability areas to be developed in all cooperative vocational education programs are the same, e.g., the technical capabilities, the occupational adjustment capabilities and the career development capabilities, the degree of emphasis should vary according to the needs of the field. For example, distributive education is very dependent on actual job experience in order to develop adequately its dominantly behavioral-science-oriented technical capabilities, while office education and trade and industrial education usually do not require the same amount of human relations skill. The three vocational capability areas will be explained more fully in Chapter III.

Educational Achievement Level. When constructing a list of expected student outcomes, program-planners should take into account the educational achievement level of the students who enter the program as well as the behaviors required to complete it. However, whenever possible, graduation requirements should be measured in terms of vocational capabilities and occupational proficiencies rather than course credits because of the large variance in job performance among persons who have completed similar course patterns and received comparable grades.

Availability of Related Offerings. Expected student outcomes of a local program will be affected by the availability of vocational, remedial and general education courses of the school. Large schools with many course offerings should build curriculums which include vocational courses from the several fields that contribute to the competencies required in the occupation for which the student is preparing. Some students may also require remedial courses in order to benefit from vocational education.

Characteristics of the Community and the School. Communities usually vary even more widely in their characteristics than do individuals. So do schools within a large school system. Therefore, even within the same school system, the expected student outcomes should be tailored to the occupational needs of the students and to their personal needs, in addition to the philosophy and objectives of the school. Schools in economically depressed areas, in particular, should prepare their own statements of expected student outcomes. For example, more stress might be placed on work attitudes within the area of occupational adjustment.

Recognizing the Occupational Competency Patterns Within a Field

The ability to recognize the differences in competency patterns among the occupations *within* the same occupational field and to plan cooperative vocational programs that take these differences into account is essential because failure to apply this concept usually results in student motivation problems, even when the classroom content being treated is germane to the vocational field. This requires a brief explanation.

Components of an Occupational Competency Pattern. For purposes of assessing the nature of any occupational field four general competency areas may be identified: (1) fundamental skills, (2) social skills, (3) the occupational technology, and (4) the discipline. If all occupations within an occupational field called only for skill mastery, a single textbook might suffice but this is not the situation.

Occupational Competency Mixes. Even though a section of cooperative vocational education may be designed for a single vocational field, students usually work in a variety of positions in that field with different competency area compositions. In some of these positions, one or two of the four competency areas above may be more important in the curriculum than the others. Hence, unless there is provision for these differences in choice of content and methods, some of the practical-minded students, who are usually employed in the lower level positions, will not realize the value of higher level competency instruction. The reason for this is that they are unable to relate this learning to their own occupational situations. For example, in a distributive education class, a student who works as a salesclerk in a variety store may not see the need for in-depth instruction in advertising, a competency which to her has relatively little immediate practical value.

Individual instruction may be a ready answer to this problem, but not a completely satisfactory one. Insofar as this discussion is concerned, the important task is not to solve the problem but rather to recognize the need for providing for differences in occupational competency patterns when preparing expected student outcomes.

FUNDING COOPERATIVE VOCATIONAL EDUCATION

Local cooperative vocational education program-planners usually want to know quite early what financial resources are available so that time and effort will not be wasted in unrealistic planning. Hence, a brief discussions of the nature of funding under Parts B and G of the Vocational Education Amendments of 1968 will be given here. Readers are encouraged to refer to their respective State Plans for vocational education for specific policies and procedures and to consult with the staff members of the vocational education division of the State Department of Education.

Provisions for Federal Funding

A local educational agency may be reimbursed for cooperative vocational education under both Part B and Part G of the Vocational Education Amendments of 1968. However, a specific program within the jurisdiction of a local educational agency can be reimbursed only under one of these parts. Thus, a specific program which does not qualify for Part G funds cannot be reimbursed from these funds, even though all or part of the students in a cooperative vocational class are judged to be disadvantaged or handicapped.

Part B Funds. The high opinion and warm feeling of the members of Congress toward cooperative vocational education has already been related; hence their support of the on-going program through Part B is assured. It is also intended that cooperative vocational education under this Part will be expanded to additional youth and adults with or without disadvantages or handicaps with predetermined rates of reimbursement to schools.

Part G Funds. First priority for these funds are to be given to areas designated by the State Board as having high rates of school drop-outs and youth unemployment. Criteria for designating such areas will not be discussed here. (See your State Plan, Part I, Sec. 1.10D or contact your State Board for Vocational Education.) The advantages of funding under Part G are as follows:

1. Possible funding up to 100% of program cost
2. Possible reimbursement of employers for added costs of on-the-job training for cooperative vocational education students
3. Possible payment for certain services such as transportation and other costs to students

4. Possible reimbursement of supervisory teacher training and other ancillary costs
5. Inclusion of non-profit private school students in the program.

Funding

1. A local education agency may be reimbursed for cooperative vocational education expenditures under Part B and/or Part G of the Act.
2. Part B funds may be used for the continuation of existing vocational education programs *and* for expansion of cooperative education to additional youth and occupational fields. The amount of reimbursement for local expenditures depends on the application criteria established in a State Plan.
3. Part G funds are meant for the development of new cooperative programs, especially in designated areas of high rates of drop-outs and unemployed youth. The advantages of Part G may be:
    a. Possible funding up to 100% of program cost.
    b. Possible reimbursement of employers for added costs of on-the-job training for cooperative students.
    c. Possible reimbursement of supervisory, teacher training and other ancillary costs.
    d. Possible payment of certain expenses such as transportation of working students.
    e. Inclusion of non-profit private school students in the program.
4. Allocation of funds (Part B) is established on the basis of manpower needs and job opportunities, vocational education needs, ability of the agency to pay, and relative costs of the programs. Allocation of funds (Part G) is in terms of priority to areas having high rates of school drop-outs and youth unemployment.
5. In order to maintain continuous effort in expanding and extending cooperative vocational education, long-range State planning is required in the Vocational Education Amendments of 1968. State plans require local educational agencies to provide information about local annual and long-range plans when applying for approval of their vocational education programs.
6. If possible, school administrators should allow from nine to fifteen months to plan and get ready before cooperative vocational education classes start.
7. Schools with neo-cooperative vocational education concepts of education for work should investigate Part D on exemplary programs and Part H on work-study programs.

Priority Funding. As a background for understanding the State Plan regulations, local program-planners should have some knowledge of priorities as they pertain to vocational education in general and specifically to cooperative vocational education. A few essential concepts and ideas are all that can be related here. Further information may be obtained from your State Department of Education.

For programs funded under Part B, the Act requires each State to determine the relative priority of local applications in terms of (a) manpower needs and job opportunities, (b) vocational education needs, (c) relative ability to pay, and (d) relative costs of programs and activities.[3] The criterion of manpower needs and job opportunities relates to the number of unfilled job openings and the impact of the program on local, state, national, and emerging job needs. Factors in the vocational education "needs" criterion consist of overall vocational education needs of people, needs of the disadvantaged, the handicapped, the unemployed youth, post-secondary education needs and in the impact of the program on these needs. The "ability-to-pay" criterion is measured by taxable wealth and available revenues per student, and location in economically depressed and high unemployment areas. Relative costs refers to factors in the local educational agencies' area which cause relatively high costs of construction, wages, equipment, and supplies, maintenance, transportation and other costs.

In placing Part B and Part G applications in priority order for funding (reimbursement) and determining level of funding, the State Board will give consideration to the criteria enumerated above and any other criteria established by the Board. When a local educational agency includes application for a Part G program in its overall application or submits a separate application, an additional priority factor will be applied. Part G applications from areas representatitve of high rates of school drop-outs and youth unemployment will be accorded first priority.

The Local Plan for Vocational Education

The new legislation does much to encourage State and local agencies to improve continuously their efforts in meeting local, State and national manpower training needs in addition to meeting the individual vocational needs of their citizens. This is done through State three-fold plans. Whereas formerly a State Plan described the contemporary program only and no local plan was required, the new document is composed of three parts – (1) the administrative provisions, (2) the long-range program, and (3) the annual plan. Each school applying for funds is required to have a local plan for vocational education.

The Administrative Provisions. Each local agency shall describe in its local plan the proposed programs, services, and activities for which funds under the State Plan are being requested. The State Plan will describe the information required and the anticipated sources of information for this description, which takes the form of an application for reimbursement.[5] Local agencies are required to develop their applications in consultation with the educational and training resources available in the area to be served. Much of the information in this publication may be used in preparing the local application, and much may be furnished as a result of the State Board's coordinated efforts with other State agencies such as the State Employment Service, the Office of Economic Opportunity, and the State Rehabilitation Service.[6] There must also be a justification of the amount of Federal and State funds requested and information on the amounts and sources of other funds available. The application also includes other information required by the State Board in determining whether the program, services, and activities proposed therein will meet all requirements of the Act, the regulations and the State Plan.

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[3] Vocational Education Amendments of 1968, Sec. 123(a) (6) (A) through (D).

[4] Ibid, Sec. 173 (a) (5).

[5] See your State Plan, Section 3.21.

The procedure for processing local applications for vocational programs, services and activities is described in Part I, Sec. 3.22, of the State Plan.

The Long-Range Plan. The State Boards are required to make long-range program plans for vocational education in their States extending over a five-year period. This plan describes the present and projected vocational education needs of the State, sets forth a program of vocational education objectives which afford satisfactory assurance of substantial progress toward meeting vocational education needs of the potential students. In order to prepare such a plan, data must be obtained from local educational agencies to make long-range plans.

The Annual Plan. State Boards are also required to prepare annual program plans which describe (a) nature of vocational education programs, services, and activities to be carried out during the year, (b) allocation of Federal and State funds to these programs, services and activities (c) how and to what extent such programs, services and activities will carry out the program objectives set forth in the long-range plan, (d) how and to what extent Federal funds allotted to the State will take into consideration the criteria concerning manpower and job opportunities and reasonable tax support, and (e) the extent to which consideration was given to the recommendations of the State Advisory Council in its most recent evaluation report. Again, the local educational agencies may be expected to participate in the annual plan responsibilities.

JUSTIFYING THE LOCAL NEED FOR COOPERATIVE VOCATIONAL EDUCATION

Sound cooperative vocational education programs are not organized spontaneously. Ideally a year or more may be required to study the needs, to plan, and to tool up properly for the operation. Even under the most favorable conditions at least nine months are usually necessary to gather essential data, obtain the necessary local support in the employment community, identify and counsel students who can profit from the instruction, employ personnel, organize and work with advisory committees, and provide facilities and instructional materials.

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[6] See your State Plan, Section 3.22.

Justifying the Need

1. A local plan for cooperative vocational education should contain facts and figures to justify the need for a program in a community. The following kinds of information are useful in justifying the need:
    a. Number of prospective students and the nature of their needs and interests
    b. Number of potential employers and the number and nature of available training positions
    c. Number and nature of full-time employment opportunities, short and long-range, for which training is required
    d. Unemployment rates and labor force distribution by occupational categories
    e. Existing vocational education program and unfilled training needs.
2. Program-planners should allow at least nine months time for initiating cooperative vocational education programs in order to gather essential data, enlist the support of employers, other faculty and community groups, identify and counsel prospective students, and employ personnel to operate the program.
3. The needs of students for cooperative vocational education are identified from longitudinal studies of their employment histories and the expressed interests and needs of students currently enrolled in the school.
4. The faculty of a school can provide information to justify the need for a program. Their understanding and support is vital to the success of cooperative vocational education.
5. A proposed local plan should contain reliable data on the potential ability of employers to provide on-the-job training and eventual full-time employment by occupational categories, job levels, and worker qualifications.
6. Advisory committees are effective means of identifying vocational education needs, and their involvement stimulates community support.
7. The local public employment office and comprehensive area manpower planning systems (CAMPS) should be consulted in establishing the need for cooperative vocational education programs.
8. Cooperative vocational education is a part of the total vocational education program and a proposal to initiate a new program should show how it complements or supplements the existing efforts to prepare individuals for work, both within the school and through other community agencies.

The need for cooperative vocational education may be crystal clear to the local top school administrators and to enough employers to support a class, but unfortunately this is not sufficient justification to convince all of the people on whom the successful inauguration and development of the program depends, nor is it likely to be sufficient for State Department of Education personnel who are responsible for reviewing applications for program approval. Significant facts and figures are needed to enlist the support of some present and/or future school supervisory personnel, guidance counselors, faculty members, additional employers, and other community groups. A strong, factual justification for cooperative vocational education will be extremely helpful to school administrators and program-implementors, not only in meeting possible resistance from opponents of the plan, but in maintaining sound steady growth during relatively low economic activity as well as during prosperous times.

Justification of cooperative vocational education is largely a matter of gathering, organizing and presenting data from the viewpoint of those who do the judging. Initially, the task may appear to be one of satisfying a State Department of Education, but upon reflection the responsibility will soon reveal a surprising number of groups of interested, important people within the school system and in the community.

Determining Student Needs for a Program

When justifying cooperative vocational education factually, the school should first establish the fact that cooperative vocational education will serve the needs of students in the school. Program-planners must keep in mind that this type of education is only one component of a total vocational education program that serves the community, state and nation. Cooperative vocational education should be available at the proper time and place in an individual's vocational development. Such optimal time, of course, varies among individuals. This implies that any justification of cooperative education should take into account data concerning a wide range of individuals and their needs.

Follow-up Studies. A school which is sincerely concerned with providing education which is relevant to the needs of students will conduct follow-up studies which show the employment histories of graduates and drop-outs. Some schools report that a large percentage of their graduates attend college; it may be more important to know what jobs all graduates have held and what problems they have had in making a satisfying and satisfactory occupational adjustment. Factors which may justify initiating cooperative vocational education are:

1. Periods of unemployment after leaving school
2. Series of unrelated entry level jobs
3. Sub-minimal incomes relative to costs of living
4. Expressed needs for training that could have been met through cooperative vocational education
5. Occupations performed which are best learned through cooperative vocational education

If it can be shown that the unmet needs of graduates and drop-outs could have been served by cooperative vocational education, a school has justification for trying to start a program. It is essential that follow-up studies contain reliable and valid data, and that information be obtained from students who left school more than one year prior to the time of the follow-up, possibly from students who left 3, 5,or 10 years earlier.

Needs of Presently Enrolled Students. There are a number of factors and methods to consider when determining the needs of students within the school. If they can be obtained, the expressed interests and needs by students may be the single most important kind of data. Many students are unduly influenced by parents, their peer groups, and by other faculty members to select courses and curriculum patterns which they feel are prestigious or popular and which are not necessarily suited to the students' individual needs and interests. Assuming students have had some exploratory occupational education and have developed some criteria for planning their own vocational development, and assuming reliable methods of obtaining information from them are employed, the following factors should be considered in justifying the need for a program:

1. Students' career plans and interests
2. Students' plans for further education
3. Students' interests in occupations for which training can be provided
4. Students' needs to work in order to remain in school or while obtaining further education
5. Nature of part-time jobs held by students, hours worked, and income earned.
6. Students' perceived relevance of schools' offerings for personal needs.

In addition to the information obtained directly from the students, other faculty members are able to provide information of value in justifying the needs for cooperative vocational education. Through their association with students they know which ones would benefit from practical learning experiences and wherein the students are likely to have strengths and weaknesses. The counselors, school nurse, psychologist, special education teachers, and school social workers can supply useful information about the individual needs of students.

It is also important to know whether or not the faculty has a positive attitude toward cooperative vocational education because their support is vital to the success of programs. Even a single vociferous faculty opponent can raise doubts in the minds of inadequately informed staff members and students; hence it is well to make certain that the faculty recognizes the need for cooperative vocational education before a program is initiated. A proposal to initiate cooperative vocational education should be presented at a meeting of the entire faculty in order that the members understand the purposes of the program and that their support is confirmed.

Cumulative records can contribute information to justify the need for a program and to confirm needs expressed by students and faculty. The results of measures of aptitudes, achievement, and interests may be used in describing the needs of particular groups of students or in assessing individual needs. The records also provide information on students' progress and adjustment to the school environment which may be helpful in pointing up the need for a different kind of learning experience.

Measuring Employer Interest in the Program

Employer interest and support must be measured very early in the planning because without them there can be no cooperative vocational education. Employers must perceive the program to be a source of potential trained manpower for full-time jobs and an opportunity to fulfill a social obligation rather than a way of getting cheap part-time help. As it is stated in the 1968 Act, the training must be for occupations "susceptible to promotion and advancement" and "related to existing career opportunities." Therefore the following kinds of information should be obtained from employers:

1. Number who can provide suitable training
2. Number and kinds of occupations in the community
3. Potential short- and long-range needs for trained full-time workers
4. Training needs for particular occupations or for competency areas
5. Number of students for whom employers could adequately provide on-the-job training
6. Number willing to provide training, even though full time employment opportunities in their organization are limited.

Surveys of Employer Interest. In establishing the needs for cooperative vocational education, a thorough inventory of employer interest is essential. Before assessing their potential participation, employers must be informed of the purpose of a program, its advantages, and their role in its operation. Thereafter a more formalized survey would establish the fact that employers are committed to the objectives of cooperative vocational education and are ready to cooperate in the training.

Advisory Committees. A representative advisory committee, which initially may be composed of employers from all the major occupational fields, can provide a general idea of the training needs of a community and the degree of employer interest that can be generated for a program. The involvement of employer groups in the initial planning stages stimulates employer interest and guides planners in identifying the most appropriate needs to serve. The advisory committee may actually participate in conducting the survey of employer interests.

Obtaining Occupational Need Data

A local school would have difficulty in justifying a cooperative vocational educational program for occupations which are not well represented in labor force data, or for those occupations in which the number of employed workers is rapidly decreasing. On the other hand, there would seem to be justification for programs which prepare workers for occupations in which there are shortages of trained workers. It is essential that local plans include reliable data on the short and long-range occupational needs for the area served by the program. The following kinds of information should be utilized:

1. Unemployment and employment rates in a geographic area and by occupational categories
2. The availability of suitable work training stations in a geographical area that may extend beyond the local community or local school district
3. Information on typical manpower needs (quantitative data) including:
    a. Youth unemployment rate in the school district
    b. Current job openings in the labor market area
    c. Labor turnover and employment expansion rates
    d. Five-year projections for employment growth
    e. Job qualifications in occupational categories
    f. Hazardous occupations for which student-learners may be exempted
    g. New and emerging occupations.

Government Publications. Vocational educators should be aware of occupational trends nationally as well as for the local areas and state for which they plan educational programs. Today, and probably in the future, people are very mobile and many students can be expected to move from one area of the country to other areas, or from rural communities to urban centers. Therefore it is necessary to know something about the demand for and supply of workers in various occupational categories and where the jobs are located. Much of this information is available in bulletins and reports published by the U.S. Government Printing Office. The following publications would provide helpful information:

1. *Occupational Outlook Handbook* (published bienially) and the *Occupational Outlook Quarterly*
2. *Manpower Report of the President* (published annually)
3. *Census of Business* (published every five years)

In addition to the publications listed there are State reports on manpower facts and figures which are available from the local public employment service or the State Department in charge of employment security.

Local Public Employment Service. Vocational education planners are encouraged to work closely with the local public employment service to keep abreast of local occupational needs. They can provide quantitative data on unemployment and employment rates by geographic areas, occupational categories and qualifications being required for employment. These are essential facts to be considered in justifying cooperative vocational education programs.

Comprehensive Area Manpower Planning Systems (CAMPS) Most states have comprehensive systems for coordinating and planning all manpower training and service programs. By consulting with the CAMPS committee for an area where the school is located, or by reading their periodic reports, the needs for training of particular groups, for specific occupational categories and in particular geographic areas can be identified. Their reports would also indicate all of the occupational training programs and other manpower services currently available and the needs for training which are not being met. The purpose of these systems is to avoid duplication of effort and costs of training and to achieve a balance between the numbers of workers trained and the available employment opportunities. The personnel in State Departments of Education who are responsible for approving local plans are likely to rely heavily on CAMPS reports in making decisions about the justification for new programs.

Considering Available Vocational Education

Decisions to start new programs of cooperative vocational education should not be made without consideration of how a new program complements or supplements the vocational education already being provided. In addition to consulting with the local public employment service and the comprehensive area manpower planning systems committee on training needs, local planners must examine their total vocational education program and the efforts of other agencies in the community which provide education for work.

Vocational Education Within the School. Cooperative vocational education may be one of many components of a total vocational education program and should be considered in its relationship to other parts. Ideally it is the "capstone" learning experience for students who have had some exploration of broad occupational fields and have developed entry level skills for the occupations to be learned in cooperative vocational education. The need for vocational instruction prior to beginning on-the-job training varies with individuals and the jobs they will enter; however, in order to provide cooperative education for most occupational fields, it is necessary to offer pre-cooperative vocational instruction. In many cases the availability of pre-cooperative instruction is a factor in getting a program approved for reimbursement.

Although it would be more often the case that cooperative vocational education is offered for too few occupational fields, administrators in multi-school districts should avoid unnecessary duplication of programs within a district. More effective instruction might be provided by homogeneous occupational field groupings. Also, it is frequently more efficient to transport students to schools for special instruction than to offer the specialized vocational instruction in every school within a district. The matter of identifying as many alternatives for program operation as possible and exploring the logical courses of action is a function of total program planning and is necessary in justifying any sections of cooperative vocational education.

Education for Work by Other Agencies. The cooperative vocational education provided by the school should complement or supplement the training available through other agencies in the community. The school should work with these agencies in the community to coordinate the total community training efforts. It is much easier to justify a program which serves an unfilled need in the community than one which duplicates training already available. A good local plan indicates how a cooperative vocational education program fits into the total training efforts of the community. Joint planning strengthens the proposal to add new programs.

SUMMARY

Once decision-makers have dispelled the notion that all cooperative vocational education is the same, they are ready to consider which program designs are most suitable in light of the needs of potential students to be served and the availability of community resources. In most situations several types of cooperative vocational education will be required to perform the task adequately. Under these circumstances consideration must be given to the articulation of the several types of operation so as to avoid conflicts among personnel involved when the program becomes operative. This requires accurate knowledge of the various operating plans, thorough understanding of the essential factors in selecting such plans and, of course, a good appraisal of the needs of prospective students and a sufficient number of employers who can provide good training on the job.

There is considerable interdependence between the availability of good training stations (employing firms) and the plan of program operation. Some arrangements provide more quality training stations than others; some are more feasible than others at given periods in program development. Thus foresighted program-planners will take a long-range view when selecting operational plans for their total cooperative vocational education venture.

Chapter III

MEETING STUDENT AND MANPOWER NEEDS THROUGH COOPERATIVE VOCATIONAL EDUCATION

Cooperative vocational education should be organized to meet the needs of individuals for occupational preparation and adjustment as well as the needs of society for trained manpower. The Vocational Amendments of 1968 provide funds to extend cooperative vocational education to additional students and prepare them for a wider range of occupations. This chapter provides suggestions on how to organize a program based on individual needs and manpower requirements of a local community.

PROVIDING FOR STUDENT NEEDS

Identifying Students' Vocational Needs

If cooperative vocational education is to be of greatest benefit, the students must be ready to make some *tentative* career choices at the time they enroll. Placement in a training job and related instruction can then be matched to the student's interests, abilities, and aspirations. This suggests that guidance and career exploration are essential *before* the students select occupational fields for exploration in depth. Beginning in kindergarten, and continuing through high school, students should have experiences which provide opportunities to explore a variety of occupations, to identify and develop talents, and to try out occupationally oriented tasks. A comprehensive program of cooperative vocational education classes at the high school or post-secondary level would provide training for many different occupations from which students could select.

Matching Cooperative Education with Students' Needs

The need for a cooperative vocational education program begins with a group of students who need vocational education to prepare themselves for employment in an occupation or occupational field. The cooperative arrangement of combining on-the-job training with classroom instruction is chosen by them as the means of achieving this goal. In order to design a program which is appropriate for the students to be served, their needs and characteristics must be clearly defined. Program coordinators must know what skills and knowledges the students possess, their interests, attitudes, and other attributes in order to place them in meaningful jobs and plan appropriate related vocational instruction. An earnest effort is made to place students in positions in which they will experience a sense of achievement and will find satisfaction. The program design may be based on an assessment of the following factors to insure meeting the needs of the students to be served:

1. Basic general educational skills
2. Specific skills to be developed prior to the occupational experience. (Pre-requisite courses)
3. Physical stamina and health

4. Personality characteristics
5. Interest in the career field
6. Special needs which the program is designed to serve

Considering Student Needs

1. The career interests of the students to be served by a program is the primary consideration in planning related instruction and placing students in training jobs.
2. In order for the program to be effective, students must have at least a tentative, broad career goal at the time they begin their on-the-job training, so that appropriate placement and relevant vocational instruction can be arranged.
3. A comprehensive cooperative vocational education program consists of several sections relating to broad occupational areas such as agriculture, distributive, health, office, service, trade and industrial occupations and sections for youth with special needs. When a number of students are rejected from existing programs, new sections should be organized to accommodate them.
4. A strong cooperative vocational education program is dependent on sound vocational guidance that is based on career development beginning in the grade school; therefore, guidance personnel should be knowledgeable about cooperative vocational education.
5. In order to profit from cooperative vocational education, students must realize success and get satisfaction from their on-the-job training. Therefore, the characteristics and needs of the student to be served must be clearly defined, and occupational entry requirements must be met.
6. If it becomes evident that training in a particular job or firm is not challenging or appropriate in light of a student's career interests, consideration should be given to changing the nature of the training and possibly to placement in a different job.
7. In programs which qualify under Part G, funds may be used to reimburse students, or pay on their behalf, unusual costs resulting from their participation, thereby extending cooperative vocational education to those students who might not otherwise enroll for financial reasons.
8. Consideration must be given to the participation of students in non-profit private schools in order to qualify for Part G funds, thereby extending the number of students served.

Providing Vocational Counseling Service

Vocational counseling services are important during all stages of vocational development. Prior to entering cooperative vocational education, students need information about occupations and about the various educational programs which will fulfill their vocational needs. Guidance personnel and vocational coordinators need to work together in providing the most appropriate educational experiences for serving students' vocational needs. The counselors refer students to cooperative vocational education coordinators for more detailed information and exploration of training opportunities. Thus the guidance personnel should be knowledgeable about cooperative vocational education and its values for students with various patterns of interests and abilities. The coordinator should keep counselors informed of the progress of individual students and give them opportunities to observe cooperative vocational education in operation.

Maintaining Sensitivity to Students' Career Development

It is reasonable to expect that students' perceptions of occupations and their career aspirations will change during the time they are participating in cooperative vocational education. The need for individual counseling and value discussions with the coordinator are important while the student is trying out occupational roles and testing reality. The participating employers and the training sponsors should also provide opportunities for discussing individual adjustment and progress on the job with the students. If it becomes evident that training in a particular job or firm is no longer challenging or appropriate in light of a student's career interests, consideration should be given to changing the nature of the training or related in-school instruction, or placement in a different job, even though there may be certain valuable outcomes to be derived from the job he has.

Extending Cooperative Education to Additional Students

Extending the Existing Program under Part B. In many schools only a small percentage of those who apply are enrolled in cooperative vocational education. Often the students who are turned down could benefit as much, and possibly more, than the small number who are accepted. A more comprehensive program of cooperative vocational education in a school should provide opportunities for training in many occupations for students with varying levels of ability and a variety of career interests. More students could be served by making better use of personnel, possibly decreasing the teaching load of the coordinators, and by making maximum use of training stations through different patterns of scheduling school and work. When the community, the school administration and faculty, the parents, and the students acknowledge the social and educational values of cooperative vocational education, public financial support for added personnel and facilities will be provided.

Extending Cooperative Vocational Education under Part G. In extending cooperative vocational education in order to serve more youth, especially those who are disadvantaged, provisions were made in Part G to reimburse students, or pay on their behalf, unusual costs resulting from participation by such students in cooperative vocational education.[1] Some students lack financial resources to pay for transportation or the tools and clothing necessary for their participation in a training program. When the student begins to receive wages which will support on-going expenses he should be guided in managing his money and assuming responsibility for his self support. It may be more economical and more efficient for the school to provide school bus transportation or to purchase other goods and services for students than to provide funds for students to develop their own means of transportation and to pay for their own goods and services.

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[1] See Regulation 102.6(b)

Provisions for Non-profit Private School Programs. In order for a program to qualify for funding under Part G of the 1968 Act, consideration must be given to the needs of students in non-profit private schools.[2] In areas of high unemployment and drop-out rates the needs of students in the private schools are much the same as public school youth in the same areas. Students in the non-profit private schools may enroll in the cooperative vocational education offered in the public school, or the public school teacher-coordinator may teach a class at the private school. Most non-profit private schools have Federal program directors or designated staff members who should be involved in the planning of cooperative vocational education to be established in areas which qualify for Part G funds.

The cooperative vocational education services offered to students in the non-profit private schools must be comparable to the services offered to students in public schools. Provisions must be made for related vocational instruction as well as supervised on-the-job training. Applications for Part G programs by a local educational agency to the State board must indicate the number of students in non-profit private schools who are expected to participate in each proposed program and the degree and manner of their expected participation. The public school shall maintain administrative control and direction over services to students in non-profit private schools. Programs carried out on public school premises and involving joint participation by students in private schools and students in the public schools should not be separated or grouped according to school enrollment or religious affiliation.

PLANNING TO MEET MANPOWER NEEDS

Cooperative vocational education is primarily concerned with meeting the needs of individuals; however, it is imperative that manpower needs be considered in providing education which leads to employment. From the standpoint of both student and local community, the occupations for which training is given must be those in which trained workers are in demand. In planning and adjusting the program to meet dynamic manpower needs and changes within occupations, the school must work closely with other agencies particularly the local public employment service. A reasonable balance between the number of persons trained and the opportunities for jobs should be maintained.

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[2] See Regulation 102.7

Considering Manpower Needs

1. If the school is to organize and maintain cooperative vocational education which is in line with manpower training needs, it must establish working arrangements with the local employment service and other manpower agencies.
2. Cooperation with the employment service is written into the Act itself. The employment service should help the school by furnishing information on manpower and specific occupational needs, identifying job vacancies and administering employment and guidance tests; and it may refer students to the school for training.
3. The school should furnish the employment service with information on the availability of training, the number of trainees enrolled and other pertinent data.
4. Cooperation with employer and labor groups is essential in all types of cooperative vocational education for such purposes as representation on advisory committees, assistance in identifying and developing training stations, giving advice on public relations, equipment and occupational content, and on program evaluation. Labor should be represented right from the beginning of program planning.
5. Community groups such as social service agencies, religious organizations, civic groups, law enforcement agencies and ethnic groups should be represented in program planning and selected program operation tasks.
6. A description of the contributions of the various manpower training agencies is required in the application of a local educational agency for financial support of cooperative vocational education. Cooperation of manpower training agencies in referral of students and in obtaining community support strengthens the entire effort.

Cooperative Planning with Employment Agencies

The local employment service and other government manpower agencies should participate in planning, promoting and implementing cooperative vocational education. Provisions for cooperation with the employment services is written into the Act itself, so the coordinator should receive a warm welcome from the employment service personnel. The employment service should provide the school with current data on employment opportunities, training needs of workers seeking employment, and other information which helps the school develop programs suited to the manpower needs of the area. It may also assist the school in identifying suitable training stations, administering employment and guidance tests, and by referring students to the school for cooperative vocational training. The objective of cooperative planning is to serve best the needs of individuals for occupational training and to avoid duplication of costs and effort. In exchange the school will need to furnish information on the availability of training, the number being trained, and other data to the employment service.

Cooperation with Other Groups in Planning and Implementing Cooperative Vocational Education

The success of cooperative vocational education depends on the support and participation of many individuals and groups in the community. In order to have this support and assistance it is necessary for these groups to participate in planning and implementing programs.

Employers and employer groups can assist the school in the following ways:

1. Serving on advisory committees
2. Identifying suitable training stations
3. Providing and preparing effective on-the-job training sponsors
4. Encouraging students to enroll in cooperative vocational education
5. Developing training plans
6. Providing resource speakers and instructional materials
7. Evaluating on-the-job performance of students and setting standards
8. Promoting legislation or funds to facilitate cooperative vocational education
9. Advising the school on training needs and occupational opportunities
10. Facilitating the full-time placement of cooperative vocational education graduates following the training period
11. Obtaining community support for programs and communicating with various community groups.

Labor groups can contribute to the program in the same ways, and they should be involved in the planning. Labor should be represented right from the start. Unless labor groups are committed to the objectives of a program and have a part in implementing it, they may view the program as not serving their best interests. Their cooperation and support usually have much to do with the success of cooperative vocational education in a community.

Other community groups such as service clubs, civic action groups, religious organizations,welfare agencies and ethnic groups, should be involved in planning and implementing cooperative vocational education. A task force made up of representatives from these groups can provide valuable help in stimulating community support through the organizations represented by the members. Community groups are interested in providing education which meets the needs of all individuals in the area to be covered and they want to participate in planning useful programs. The supervisor or coordinator of cooperative vocational education must interpret the program to these community groups and draw on their assistance making education a joint enterprise between the community and the schools.

Cooperation with Other Schools and Agencies in Filling Manpower Needs

Coordination of the various work-related training programs is necessary to fulfill manpower needs efficiently. A community may have many different types of "education for work" such as work-experience programs, adult education classes, apprentice training programs, summer jobs programs, voluntary social service projects and Junior Achievement Companies. Some of these may serve as feeder programs to cooperative vocational education when the participants are ready for additional training; some may provide for further training of graduates and school drop-outs. Information about the opportunities for cooperative vocational education must be communicated to the supervisors and directors of these programs so that young people can be referred to the school for continuing education in their field of interest. On the other hand, the cooperative vocational education coordinator should be familiar with the various training programs in the community in order to avoid duplicating their services and in order to be able to refer students whose needs may be served best by these agencies or programs.

A coordinator also must be familiar with the occupational education programs which students may take after completing a cooperative vocational education program. Students who want further training may be referred by the coordinator to post-secondary vocational schools, junior colleges, four-year institutions, adult education programs, private trade schools, and other agencies which offer the type of additional education wanted.

In order to justify expenditures for new programs it is necessary to explain how the cooperative vocational education program fits into the total training effort of the community. For example, it may be impractical to offer similar types of training in every school of a community, and a new program should be planned to fill a neglected need.

PROVIDING OCCUPATIONAL EDUCATION TO MEET CHANGING NEEDS

With the rapid changes that are occurring in occupations, the school must adapt vocational education to current and future employment opportunities, as well as to the personal needs of students and to societal needs. Cooperative vocational education need not be narrow job training unless the planners and operators make it so, either consciously or unconsciously. There are more viable ways and means of sensitizing occupational education to the changing occupational and social needs in cooperative vocational education than in educational plans which do not have accompanying occupational experience.

Provisions for specific policies and practices dealing with occupational and social change must be built into the program plan, and this feature must be periodically evaluated if the program is to remain flexible during changes in administrative and other personnel. Among the features to consider in fortifying a program against obsolescense are up-to-date surveys, advisory committee efforts directed toward problems of occupational flexibility, utilization of the coordinators contacts to receive information on change, and focusing periodic evaluation on curriculum needs.

Changing Occupational Needs

1. In order to provide training for the new and emerging occupations of the community, a continuous occupational survey system is needed in which part of an occupational field is surveyed on a monthly basis or on some other suitable time period.
2. In order to plan relevant vocational education the school should have current and projected data on the nature and number of occupations in the geographical area where the students expect to find employment.
3. Advisory committees composed of employers and employees representing the occupational fields being served are necessary to keep training up to date and to project future needs in training.
4. Frequent follow-up calls by the coordinator on training sponsors, and periodic conferences with progressive business personnel provide information on new occupations and competencies which should be developed.
5. Evaluation of student outcomes in terms of job satisfaction and satisfactory performance are important means of evaluating the effectiveness of a program.

Updating Survey Data

The earlier discussion relating to cooperative vocational education built-in manpower training controls pertains largely to occupations for which students in the ongoing program are preparing. Meeting the training needs of new and emerging occupations requires specific practices that prompt awareness of such needs. Among these is a type of occupational survey that is kept current through continuous input of data, not from the employment service alone or from sporadic sources but rather from systematized surveys. This does not demand an annual costly, time-consuming project but rather setting aside time each month, or other suitable period of time, to survey a segment of the occupational area being served. A card file of employers is basic to this operation. Occupational surveys should include information on current and projected employment, labor turnover, and employers' evaluations of the performance of graduates and their suggestions on training needs.

Using Advisory Committees to Up-Date and Project Content and Procedures

For each occupational field in which training is given there should be a local advisory committee composed of representatives of employers, employees, labor groups, and educators. The primary purpose of this committee is to advise the school on relevant content and procedures for operating cooperative vocational education programs. The advisory committee acts in a consultative capacity and has no administrative functions. It may assist the school in the following ways:

1. Communicating the values of cooperative vocational education in the community
2. Preparing training sponsors to be effective in job instruction

3. Identifying suitable training stations
4. Evaluating the effectiveness of cooperative vocational education programs
5. Assisting in organizing cooperative vocational education programs
6. Serving as a liaison group between the school and the business community
7. Providing instructional help through resource speakers, trade materials, and occupational information
8. Working with labor and management groups at the local level to insure maximum involvement and cooperation
9. Serving as a liaison group between the local committee and the State advisory council
10. Assisting in determining the criteria and standards for measuring job performance of the student at the training station
11. Providing public relations activity at the local level
12. Assisting in solving problems regarding the program that develops at the local level
13. Projecting manpower needs in their occupational field

Using Coordinator's Follow-up Calls to Keep Occupational Education Up to Date

It is generally recommended that coordinators visit each training station personally at least once every two weeks to check student progress and to plan on-the-job and in-school learning experiences which complement each other. The alert coordinator uses this contact with employers and training sponsors as an opportunity to learn about changes in occupations and new operating procedures which should be incorporated into classroom and job instruction. He consults with the training sponsor and obtains suggestions on the competencies that should be developed in school. Through his observations he learns new techniques which can be taught to his students. The employers and training sponsors provide him with instructional materials which students may use for independent study. Through continuous contact with practitioners he keeps abreast of change and the trends which have implications for keeping instruction relevant and up to date.

Providing for Periodic Program Evaluation of Student Outcomes

An important purpose of the coordinator's bi-weekly calls on the training sponsor is to evaluate student outcomes. During these calls the coordinator learns whether or not instruction is contributing to the development of occupational competence. In addition to continuous follow-up of the employer's evaluation of student performance, the coordinator has periodic interviews with the students to determine how well the students' needs are being met. The value of cooperative vocational education depends on the satisfaction students receive from their jobs as well as their ability to perform satisfactorily for their employers. Satisfaction of the student and satisfactory performance are interdependent. Both should be appraised in an evaluation of the program.

After students have completed training in a cooperative vocational education program, there should be periodic follow-up studies at one, three, and five-year intervals to determine if graduates have achieved the intended outcomes. The following types of information would be helpful in evaluating a program:

1. Retention in occupational field for which trained
2. Number and nature of positions held since graduation
3. Additional training received or required
4. Current income and level of responsibility
5. Perceived value of cooperative training
6. Recommendations for changes in content or procedure
7. Employer's evaluation of job performance of graduates
8. Mobility (in community, State, Nation)

PROVIDING RELATED INSTRUCTION

Related instruction in cooperative vocational education should facilitate the development of capabilities the student needs to enter, adjust and advance in a satisfying career. Even though it is expected that a student's career interests and plans may change, the desired vocational capabilities and competencies which he will need in future occupations are learned through the medium of a specific job within the context of his economic and social environment. Factors to consider in planning related instruction are: (1) the capabilities and competencies to be developed, (2) provisions for individual and group needs, (3) appropriate sources of learning, (4) coordination of instruction from the several sources, and (5) appropriate methods of instruction.

Recognizing the Vocational Capability Areas in Organizing Instruction

The vocational capabilities to be learned may be classified as (1) *Specific skills* which are derived from an occupation, (2) *Occupational adjustment capabilities* which are needed to succeed in a work environment, and (3) *Career development capabilities* which are concerned with helping the learner find a satisfying occupational role. The emphasis given to each of these areas will vary with the purposes of the cooperative vocational education program, the occupations being taught, and the characteristics of the students. For example, in regard to specific skills, in some occupations it takes much more time to learn the required technical information or to operate equipment than others. In regard to occupational adjustment capabilities, some groups of students will require more instruction than others on how to get along with co-workers and their supervisors and on how to learn a job. In regard to career development capabilities, the instruction focusing on career development will vary with the ages of the students and their previous experiences in exploring occupations. It is generally agreed that the three vocational capability areas are related and should be integrated rather than organized in blocks of time or units of instruction.

Instruction

1. Cooperative vocational education is learner centered, hence instruction should focus on the appropriate balance of specific vocational skills, occupational adjustment, and career development capabilities needed by the worker in his occupation.
2. In order to enable the student to develop the necessary balance, instruction should be organized to produce competencies which are (1) needed by all workers, (2) needed by workers in an occupational field, (3) needed by workers of a specific occupation only, and (4) needed by a particular worker in his place of employment only. Thus there usually are total class activities, small group activities, and individual activities in the classroom in addition to the specific learnings of the particular job.
3. Three sources of learning: (1) the classroom, (2) the job or in some cases a sheltered workshop, and (3) the vocational youth organization, are essential in achieving the balanced occupational competency patterns needed by all students. The coordinator is responsible for correlating the instruction and learning from these three sources.
4. The methods of instruction in cooperative vocational education should be tailored to the needs of the student. Generally these are based on a close teacher pupil relationship, using vocational methods that persist on the job. Adult techniques such as the conference method, treatment of students, development of multiple competencies and emphasis on principles and practice should be utilized.

Specific Skills. For each occupational field there are specific skills, knowledges and attitudes required to progress in that field. The instruction is directed toward the following kinds of competencies:

1. Manipulating tools or equipment
2. Gathering, processing, communicating or applying technical information
3. Constructing, assembling or combining elements
4. Performing a service
5. Others, drawn from the specific occupation

Occupational Adjustment Capabilities. One of the expected outcomes of cooperative vocational education is the students' ability to adjust to work environments – the plant, office, store or institution. The intent is that by teaching him to interact effectively with fellow workers, supervisors, and the conditions under which he works in the cooperative training station, he will acquire capabilities which will persist as he progresses in his career and takes positions in other work environments. Occupational adjustment capabilities include the following:

1. Learning how to learn a job
2. Interacting with co-workers, supervisors, and employers
3. Participating in worker groups as a member and leader
4. Developing desirable work habits and attitudes
5. Making rational economic decisions about employment, spending, saving, and participating in a private enterprise economy
6. Preparing for the jobs ahead
7. Managing work and leisure time
8. Keeping abreast with current developments in the occupation
9. Others, drawn from the environments where the occupation is found.

Career Development Capabilities. Another expected outcome of cooperative vocational education is the student's finding satisfying occupational roles in which he can get a sense of achievement and self-realization. The instruction focuses on learning about the occupational field and the lives of workers in the occupation and looking inward at one's own potential needs, abilities, and aspirations as they relate to occupations and careers. The capabilities would include:

1. Assessing and analyzing one's own needs, interests, abilities and aspirations
2. Assessing and analyzing the potential opportunities and satisfactions of an occupational field
3. Predicting one's own chances of being successful and satisfied in the occupational field
4. Making decisions and plans to achieve goals and aspirations.

Providing for All Types of Instruction

In providing instruction for a group of students enrolled in cooperative vocational education, the teacher must take into consideration: (1) the capabilities and competencies needed by all workers, (2) those which are common to an occupational field, such as blueprint reading might be for many trades, (3) those competencies which are common to specific occupations, such as seasoning foods for quantity food preparation fields, and (4) those competencies which are specific to the job a student is learning to perform at his training station. Obviously, when a class of students is preparing for similar occupations it is possible to provide instruction which is relatively more specific and pertinent for the occupations being studied. When the class members are preparing for a diversity of occupations, the instruction is likely to be of a very general nature except for what is learned through independent study and what is taught on-the-job. The limitations of time and expertise of the teacher-coordinator in a diversity of occupations makes it difficult to provide learning experiences which develop occupational competencies when a class is composed of students preparing for many unrelated occupations. Then, too, students do not get the same benefits from discussion of job experiences as they do when they are studying related occupations.

Instruction in Capabilities Common To All Occupations. There are some capabilities which are common to all occupations such as employer and co-worker relations, how to learn a job, how to live on one's earnings, organizing one's work, recognizing benefits and capitalizing on work experiences, and participating in employee groups. This learning may be provided through group instruction using discussion, the conference method, panels, speakers, and other methods involving the entire class, irrespective of each student's job or career interest.

Instruction in Occupational Field Capabilities and Competencies. This instruction is drawn from an occupational field and includes those capabilities and competencies needed by all workers in a field such as office occupations, distribution, trades or health occupations. In office education typing and general office procedures is an occupational field competency. Marketing principles are usually taught to all students in distributive education. Health occupations education might include basic human needs as a common area of learning for the entire class. It is essential that students develop the occupational field competencies and capabilities in order that they can advance in the occupational field and adjust to changes in occupations within the field. If classes are organized by occupational fields and the teacher is competent in the field, a large part of the instruction should be in these competencies and capabilities because they prepare students for growth and flexibility.

Instruction in Individual Occupation Competencies and Capabilities. Instruction for an individual occupation is important because the student's interest at the time of enrollment usually is to learn a salable skill and qualify for employment. If he experiences a sense of achievement and self-worth in being able to perform an occupational skill, he is motivated to learn more about the occupational field. These learning outcomes are relatively tangible and seem practical to the learner when they are applied on the job. An example of this type of instruction might be teaching individuals or a group of service station trainees to change the oil in an automobile or teaching ready-to-wear trainees to dress a manikin for a display. Then, when they are exposed to the tasks on the job, they have some basic skill and a degree of confidence in undertaking the new responsibility. The amount of similarity among the occupations of the class members will determine how much of the classroom time can be devoted to individual and to group training for specific occupations. Of necessity, some instruction must be provided through independent study materials and individual help from the teacher-coordinator.

Guidance in Learning Specific Job Competencies and Capabilities. The competencies and capabilities which are unique to the job the student has in his training station are learned there; however, the teacher-coordinator facilitates this learning by guiding the student in what to observe and how to learn the unique duties and responsibilities of his job. For example, an employing organization has unique policies and procedures which the trainee must abide by, also each business has its own system and special equipment. The student learns how to analyze a job and how to use resources in the training station to enrich his learning experience. He learns *how* to learn a job by learning one.

Utilizing Appropriate Sources of Learning.

Different kinds of capabilities and competencies are best learned in different types of environments. In cooperative vocational education three sources are essential to achieve the balanced capability pattern needed by all students – the classroom, the job, and the vocational youth organization. (A fourth source, the sheltered workshop, may be necessary for handicapped learners or for other students as a substitute for the real job environment when one is not available.)

The Classroom. The capabilities which are best learned in group instruction and those which the students must develop before they are applied on their jobs are learned in the classroom. Experiments with different methods and practice of skills are often difficult to provide at the training station. Theory and principles are very difficult to learn on the job alone because of the time and ability limitations of on-the-job trainers in organizing this type of instruction. Classroom instruction must be correlated with the job instruction so that the student has the related learning he needs to support his on-the-job training.

The Job. In cooperative vocational education the job is the applications laboratory where the student tests theory and practices the principles learned in the classroom. The job may also be the primary source for learning specific job competencies and for discovering some principles which may be overlooked in the classroom. Attitudes and values are usually developed on the job but are examined and clarified in the classroom.

The Vocational Youth Organization. Some of the most effective learning is achieved when the students assume the major responsibility for planning and conducting their own activities. A vocational youth organization is a means of helping students develop leadership and group membership skills which prepare them for satisfying adult citizen-worker roles. In a local chapter they learn parliamentary procedure and democratic processes of achieving group goals. There are state and national organizations for each of the occupational areas, and local chapter members gain an occupational identity through these affiliations. The following youth organizations have local, state, and national associations:

FFA – Future Farmers of America

FHA – Future Homemakers of America

VICA – Vocational Industrial Clubs of America

DECA – Distributive Education Clubs of America

OEA – Office Education Association

Chapter projects and activities are student-directed but are aimed at the development of occupational competencies. A project in which the students raise funds to support chapter activities should be organized in such a way that students learn to utilize the resources of the group in organizing, conducting and evaluating a business venture. A teacher is justified in using classroom time for the chapter when the activities contribute to vocational capabilities and occupational competence. The essential difference between a regular classroom learning activity and a chapter activity is in the roles of the teacher and the learners. The teacher is an advisor to the chapter and students are responsible for planning and directing their own learning.

The Sheltered Workshop. A school may provide occupational education in a sheltered workshop for students who are not ready for employment in private business and industry as a prelude to cooperative education or when suitable training stations are not available. In a sheltered work setting students may operate a business under supervision of a teacher, learning all of the duties of buying, selling, promoting, and managing a retail operation. Similar workshops, some of which may be operated away from the school, can be provided for child care, repair services, laundry and dry cleaning, food service, and other occupations. These experiences cannot substitute for on-the-job training but can provide effective learning which prepares students for gainful employment.

Coordination of Instruction from the Several Sources.

The coordinator (teacher-coordinator) is a director of learning who coordinates the instruction given in the classroom, on the job, and through the vocational youth organization chapter. He tailors the instruction to the needs and the learning styles of each student. When he calls on training sponsors he gets suggestions for classroom instruction the students need to perform their jobs. He informs the training sponsor of skills a student has acquired in school which he is ready to apply on the job. Chapter projects are undertaken after students have been prepared in the classroom to carry out the activity. Utilizing the sources which are most appropriate in achieving the desired outcomes, the coordinator directs the "program" of instruction for each student.

Selecting Instructional Methods.

As a "director of learning," the cooperative vocational education teacher is expected to make use of instructional methods which are appropriate for the students and which contribute to the development of employment qualifications. In addition to occupational experiences and mastery of the technical content, the teacher must be able to stimulate student interest and use a variety of techniques that develop multiple skills. The methods of instruction have an important effect on the total personal development of the student and his ability to learn new skills as he progresses in his career.

Teacher-Student Relationships. The cooperative vocational education teacher-coordinator should help his students make the transition from teacher-directed learning to self-directed learning. Students learn this self-direction through teacher-pupil planning of instruction. They are more committed to achieving the objectives when they have a part in determining the objectives and selecting the methods of learning. As students progress in the program the teacher-coordinator can increase student responsibility for self-direction and planning of instruction. Because of his close relationship with the students, his role is likely to shift from an authority figure to that of an advisor and resource person.

Using Vocational Methods. The cooperative vocational education teacher should use methods of instruction and learning which will persist when students enter full-time employment. Methods of inquiry such as experiment, seeking opinions of experts, searching the trade literature, making observations, conducting surveys and other techniques are tools the student can use as he progresses in his career. Student conducted demonstration, as a method of instruction, develops ability to train and teach other employees which students often must do if they are to advance in their occupations. In developing human relations capabilities, case problems and role-playing improve the student's ability to handle these problems on the job. Decision-making is learned through practice in making decisions. If students learn to interact effectively in class they are likely to be successful and get satisfaction in their interpersonal relations at work.

Using Adult Techniques and Treatment of Students. Currently, students who choose to enroll in cooperative vocational education are usually more mature than other students in their grade. If they are not more mature at the beginning, they will certainly adopt some mature attitudes and behaviors as they begin earning and working with adults in their jobs. It is essential that the teacher recognize their need to be treated as adults, and plan instruction which allows them to play adult roles. Conferences, panel discussions, talks by speakers from business and industry, and student led activities appeal to students learning to be adults.

Choosing Activities that Develop Multiple Capabilities and Competencies. Learning activities and projects should be conducted in such a way that the students develop multiple capabilities and competencies which prepare them for employment. The following capabilities and competencies can be developed and improved by providing learning activities whereby students practice these skills:

1. Communicating (oral and written)
2. Giving and following instructions
3. Organizing and planning work
4. Working in a group or committee
5. Creating goodwill
6. Making decisions
7. Evaluating one's own performance
8. Seeking needed information
9. Computing and working with figures

When the above skills are taught and practiced in conjunction with their application to an occupation, students are more likely to master them than if they are taught in isolation from the occupational skills. These are important factors in achieving success and satisfaction on the job.

Emphasis on Principles and Applications. One of the most important contributions cooperative vocational education can make in preparing students for employment is in teaching principles which the student can apply after he enters full-time employment. Too often beginning workers are given a repetitive task which they never see as a part of a meaningful total operation or as an opportunity to learn a new skill. Business and industry personnel are often unable to teach principles and theory underlying policies and procedures even though they recognize their importance in successful job performance. Instruction planned and supervised by the teacher-coordinator must emphasize the principles involved in performing an occupational task and the applications to be made in practical situations.

An example of emphasizing a principle is in teaching students about profits of the firm. He should learn why profit is important, how he profits personally when the firm profits, and how his job performance is related to the firm's profits. Then he is encouraged to find ways he can participate in making the operation which employs him more profitable.

Another example is in teaching human relations. The students should learn how to interact effectively with co-workers, employers, customers, patients, or with whomever they have contact in their work. Given the principles and some practical applications with practice, they have skills which will persist long after they have left the school.

PROVIDING APPROPRIATE FACILITIES AND EQUIPMENT

Some school board members and administrative personnel may be under the impression that in cooperative vocational education the employers supply all the necessary facilities and equipment and that financial outlay for this purpose should be virtually nil; this is far from the truth. In fact, a poorly equipped and improperly located classroom may be more conspicuous in cooperative education than in other educational plans because of the close relationship between the school and the community. Also, students who come in contact with the latest machines and materials are more conscious of an outmoded school environment than are regular students.

When making decisions concerning facilities and equipment, program-planners should keep in mind the following conditions under which cooperative vocational education operates: (1) the purpose of the program is to help students bridge the gap between school and work life, hence an occupational atmosphere is essential, (2) communication with employers and the community should be made as easy as possible, and (3) each student really has a curriculum of his own and needs individual counseling and individual instructional materials.

Equipment and Facilities

1. Cooperative vocational education classrooms should be designed and equipped to facilitate the teaching and practice of occupationally relevant capabilities and competencies.
2. Classrooms for all cooperative vocational education programs should have movable individual tables and chairs which can be arranged for large and small group discussions and for individual instruction and study purposes.
3. All cooperative vocational education classrooms should have storage space with individual drawers or portable bins where each student can keep independent study materials and projects on which he is working.
4. Adequate space and equipment for displaying and storing reference books, periodicals and other occupationally related learning materials should be provided.
5. The coordinator should have an office adjoining the classroom with outside phone service, record filing cabinets and desk where he can counsel with students individually and maintain continuous contact with employers on the telephone.
6. Model stores, offices, shops, laboratories, and other simulated work stations are highly recommended to provide opportunities to develop job skills and attitudes.
7. It is usually desirable to have all of the classrooms, labs, and offices for cooperative vocational education in the same general location within the school.
8. Special instructional equipment is needed for each occupational field and is usually a reimburseable cost depending on the State Plan arrangement.

Determining the Location of the Classroom and Coordinator's Office

Easy access to the coordinator's office and classroom for the students, employers and resource visitors is an important consideration in locating cooperative vocational education facilities for several reasons. Most important of these is the fact that there is considerable coming and going by these people and by the coordinator himself, so location near an entrance reduces inconveniences and minimizes the disturbance caused by this traffic. The coordinator's office should adjoin the classroom but also have a corridor entrance so it can be entered without having to go through the classroom. It is usually desirable to have all of the classrooms, laboratories or shops, and offices for cooperative vocational education in the same general location within the school. Easy access to the counselor's office should also be considered.

Equipping the Coordinator's Office.

There are many duties associated with the coordinator's job that are not common to most teaching positions; therefore, it is necessary for the coordinator (teacher-coordinator) to have adequate facilities and equipment to fulfill his numerous administrative and counseling responsibilities. In addition to the usual reports and records, he has responsibility for participating in the selection of students, supervising the cooperative occupational experience, making periodic follow-up studies and sponsoring a youth organization. Sometimes his office is used for conferences with employers or parents, or both; and it is frequently used to discuss confidential matters with students and staff members.

The many uses of the coordinator's office call to mind the following considerations:

1. Adequate space to insure comfortable seating and good communication for three or four people – more if possible
2. Provisions for maintaining the privacy of confidential matters with visibility of the classroom
3. A telephone with connections for outside calls
4. Ample filing equipment
5. Appropriate desk space and a typewriter
6. Some storage space for audio-visual equipment and book shelves as needed.

Furnishing the Classroom.

The primary purpose of the cooperative vocational education classroom is instruction, but it usually serves a number of other purposes. For example, it may be used as a laboratory, a study center, a counseling materials resource center, a meeting place for vocational youth organization groups and outside advisory groups, or an adult evening school classroom. If a separate facility is not provided, it may be used as a materials production room, a display workshop and a storage room.

Psychological Values of a Good Learning Environment. There are a number of psychological values of good facilities which pay dividends in addition to the primary purpose. One of these is their advertising value among students and potential program supporters. Students are frequently attracted to an occupational education program because the environment where the instruction is given appeals to them. For example, many students, either consciously or unconsciously, are looking for a very practical education; they observe an attractive cooperative education facility, sense its purpose and explore the possibilities in terms of their needs. Adult evening school students, PTA members and school visitors may be attracted by the facility and pass the word along to prospective students.

Good facilities have a pronounced psychological effect on the cooperative students themselves. Most of them take pride in an attractive room and identify with it – to some it may be a home away from home. Students learn better in a meaningful environment; they may also learn better on their jobs because of the similarity in atmosphere and activities. These are but a few of the psychological values of good facilities which contribute to effective instruction.

Educational Rationale for Proper Classroom Equipment. Part of the rationale underlying ample investment in facilities and equipment concerns the need of teenagers for physical activity. Most of them like to work, at least partly, for this reason. Likewise a large number of them dislike being in school unless they are engaged in interesting activities of a learn-by-doing type. Such activities require good facilities and equipment. They facilitate motivation to learn.

A second, and perhaps stronger argument, deals with the application of learning. Most educators accept the proposition that the classroom is the center of cooperative vocational education learning and that the job serves as a work experience laboratory. This may not be a completely accurate statement of what takes place in reality, but it is generally true. If we accept this concept the school must provide up-to-date facilities and equipment to teach the principles adequately so that they may be applied in the real work environment. The job is very seldom a place to experiment; the employer usually has too much at stake to permit this on a large scale. There is another good reason for learning the skills at school whenever possible and that is the fact that there is seldom time for the novice to explore alternatives on the job. Usually he needs to think things through ahead of time, and in many cases practice them in a simulated situation, before trying them out in real-life employment. Persistent failure has a way of dulling enthusiasm.

Common Classroom Equipment. Cooperative vocational education classrooms usually reflect the atmosphere of the occupational field(s) they represent; however, there are a number of features in common. Most of them have a sink and a mirror – the sink to save time and trouble in clean-up and the mirror to help save jobs by emphasizing personal appearance. They also have tables and chairs which are easily movable rather than chairs with arms for writing. (Trapezoid shaped table tops have met with great favor because of the many possible groupings and arrangements). No *reputable* program is without facilities for storing each student's individual study materials because no teacher will continue to direct individual study very long without this type of provision. In addition, all classrooms should provide for a simulated job environment that is suitable for practice or drill and for important role-playing assignments.

Mention should be made of the importance of good facilities for a variety of discussion techniques. Perhaps more than other educational systems, cooperative vocational education utilizes problem-solving discussion devices such as conference leading, forums, symposiums, panel discussions and more than the normal amount of role-playing. Occupational adjustment competencies are frequently taught by these methods.

Occupational Entry Job Requirements. An employer of office workers usually expects the beginning office employee to have a certain degree of skill in typewriting and possibly shorthand or machine transcription. The automotive repair firm may not want a beginning worker to use expensive equipment until the student has had some practice work in a school shop. The salesperson may have to know how to sell before he can handle the problems of real customers in a store. In each occupational field there are some skills or attitudes which must be learned before the student can begin on-the-job instruction or before the real work environment can be used for application and practice. Therefore the cooperative vocational education classroom should be equipped to develop the occupational skills needed to enter the field. These facilities can also be used for pre-cooperative education classes and adult vocational education courses.

Achievement Level of Instruction. Cooperative vocational education is usually intended to prepare students for promotion and advancement and to reach their greatest potential. On-the-job training cannot always provide the time or the use of materials and equipment to develop high level skills. The purposes of the program should be considered in planning appropriate facilities. If the school is, in fact, training highly skilled technicians or for occupations which require considerable practice outside of the work environment, a more extensive facility is required. The beginning occupational experience combined with the related instruction given in a well-equipped school facility should prepare students for occupations beyond the entry level.

SUMMARY

Without a reasonable balance between manpower demands and labor supply in an occupational field, the vocational goals of a number of cooperative vocational education graduates will not be met. A student must be able to get a job before he loses his skill and zeal for the occupation for which he has been trained.

The question frequently arises as to whether the school should identify the students who want and can benefit from cooperative vocational education and then locate appropriate positions for them, or reverse the sequence. From the educator's viewpoint the former procedure should prevail. Unfortunately this may not always be feasible, at least during the outset of the program, because much depends on the availability of appropriate training stations. Judgments about offerings in occupational areas are made on the basis of compatibility of students' goals and needs with available jobs to fulfill these requirements during the training period.

Extending cooperative vocational education to additional students and preparing them for a wider range of occupations is encouraged through the new legislation. Conscientious program planners take into account the needs of *all* potential cooperative vocational education students and of employers. They try to be fair with employers by providing the proper classroom instruction and equipment to prepare students to reasonable standards of skill and social behavior before they are placed on jobs to continue their training.

There is a strong tendency for vocational programs to become academic and lose sight of the reasons for which they were created. To prevent this from happening, occupational surveys, advisory committees and strong ties with the employment service are written into the legislation. If these practices are to provide continuous program viability, the proper relationships and procedures should be effected as soon as possible.

Chapter IV

SUPERVISING THE PARTICIPATION OF EMPLOYERS

Cooperation between the school and employers in a community is a key element of cooperative vocational education. Employers have diverse reasons for cooperating with the schools in providing cooperative vocational education; therefore, the school must supervise adequately employer participation. In order to achieve the objectives of the program in meeting the needs of individual students, adequate time is needed for coordination activities. This coordination and supervision begins with identifying suitable training stations and enlisting employer cooperation. Then it is a matter of maintaining standards of learning and of working with employers to help individual students become satisfactory and satisfied workers.

IDENTIFYING TRAINING STATIONS SUITABLE FOR EMPLOYMENT

Selection of Training Stations

1. The success of cooperative vocational education depends greatly on the selection of suitable training stations. The term "training station" is used to identify the place of employment.
2. Training stations should have the potential to provide training for occupations that are challenging and worthy of the student's learning time and efforts.
3. The policies and practices of the potential training stations should be such that the community will approve of their participation in the program. The community will be critical if the participating firms do not have a good reputation.
4. The management and the employees in potential training stations should be committed to the training objective and be willing to plan appropriate training and instruction for students.
5. The on-the-job training content should be matched to the capabilities and interests of students. A student is placed in a training station because of his interest in what is to be taught and because of the potential it offers for his growth.
6. It is essential that the training stations provide training sponsors who are competent in their occupations, who are able and willing to train students and who serve as worthy models for students to emulate.
7. The training stations should furnish work environments which are conducive to good health, to safety, and to the development of job satisfaction in students.

Before a decision is made to provide cooperative vocational education in a community there should be a preliminary survey to determine whether or not there is a sufficient number of employers who are capable and willing to deliver quality on-the-job training. The local public employment service, the area manpower planning committees, and the steering committees, made up of representatives from business, industry, and other community groups concerned with vocational education should confirm the availability of training stations. Members of these groups should have knowledge of the potential opportunities and needs for training in the community.

Before getting classes underway the coordinator must select the specific training stations for his students and ask them to participate in the on-the-job training. The student's needs, interests, and aspirations are the most important considerations in determining the suitability of a training station. In order to make appropriate student placements, the coordinator must have some criteria for determining what constitutes a suitable training station.

Occupational Criteria

The Vocational Amendments of 1968 specify in Sec. 173 (a) 3. that on-the-job training should be "related to existing career opportunities susceptible of promotion and advancement," and "does not displace other workers who perform such work." In various parts of the 1968 legislation it is implied that the number of students trained in an occupational field should roughly correspond to the distribution of occupations in the labor force. The occupations must be considered in terms of the potential employability of the students during the training period and the contribution the occupational training can make to the students' vocational development. The characteristics of the students must always be considered in evaluating and selecting the occupations to be learned.

Some of the factors to be considered in examining occupations within a training station are:

1. Compatibility of the occupations with the capabilities and the career interests of the student so that the job will be interesting and challenging
2. Sufficient learning content to be worthy of the time and effort to be expended in learning the occupation
3. "Susceptible to promotion and advancement"
4. Relationships to existing and future career opportunities.

Policies and Practices of Employing Firm or Organization

The reputation of the employing firm in the community is an important consideration because people in the community tend to evaluate cooperative vocational education partly by the type of firms or organizations which participate. Every effort should be made to select employers from whom students can learn desirable operating practices and work standards. Some policies and practices to consider in selecting suitable training stations are:

1. Wage scales in relation to those paid for similar occupations in the community
2. Relationships with labor groups and other employers, and with customers and clients
3. Work standards and efficiency of operation
4. Hiring, promotion and dismissal practices
5. Working conditions and employer concern for well-being of employees
6. Credit record and financial stability
7. Support of community activities and welfare

Management Objectives and Attitudes

It is essential that employers of cooperative vocational education students are strongly committed to the training objective. Their attitude toward training is reflected in the way in which they train their regular employees. A firm or organization which has an on-going training program and seeks to develop the maximum occupational growth of each employee is potentially a suitable training station. In evaluating the attitudes of employers toward training some possible criteria are:

1. Employment of personnel responsible for planning and conducting training
2. Type and amount of training given to regular employees
3. Quality of facilities for training
4. Willingness of employer to participate in planning a training program for student(s) and agree to a written training agreement
5. Expertise of employees in performing their occupations.

Training Content Criteria

The training content of an on-the-job learning experience should be matched to the capabilities of the student. If the training content is not challenging and capable of improving the occupational competencies of a student, then it is not a suitable training station. Some students, of course, may take a long time to learn even relatively simple jobs. Other students are capable of learning highly skilled jobs and of assuming increasing responsibilities rapidly as they progress in the program. Some factors to consider in evaluating training content are:

1. Amount of training required to perform the occupation
2. Opportunities for increasing responsibilities and upward occupational mobility
3. Applicability of the training content for future employment
4. Ability of the firm or organization to provide adequate instruction

5. Ability of the school to provide the necessary related instruction
6. Attitude of on-the-job instructors (training sponsors) toward the training content.

Personnel for Training

The effectiveness of an on-the-job learning experience depends to a great extent on the personnel who do the training. The employer or manager may be very willing to participate, but frequently the responsibility for training and supervision of the student is delegated to a supervisor or an experienced employee. The coordinator will need to consider the following factors in evaluating the personnel who will conduct the actual training:

1. Technical competence in the occupation to be taught
2. Interest and attitude toward training and students
3. Ethics and habits which students can emulate
4. Ability and willingness to allot sufficient time and effort to training
5. Willingness to work with the coordinator in planning on-the-job learning experiences and related classroom instruction, and in evaluating student progress
6. Ability to adapt job instruction to the learning style and capabilities of the student
7. Competence in human relations and sensitiveness to student needs for recognition, guidance and direction.

Working Conditions Criteria

The working conditions should be carefully evaluated in determining the suitability of training stations because the school is responsible for the health, safety and job satisfaction of students. Placement of students in training stations where the environment is unpleasant, or not in keeping with generally accepted standards for the occupation, breeds dissatisfaction on the part of students, parents and others who expect cooperative vocational education to maintain high standards. Some working conditions to consider in selecting suitable training stations are:

1. Convenience of location with respect to students' being able to get there from school and home safely, and within a reasonable period of time*
2. Healthful and safe working conditions
3. Hours of work which allow the student sufficient time to keep up with his school work, participate in some recreation and get adequate rest
4. Adequate equipment and facilities to practice the occupation for which training is planned
5. Compliance with local, State, and Federal labor regulations regarding wages, hours, working conditions, insurance and hazardous occupations.

***Students can be compensated for transportation costs in some situations. See page 39.**

EXTENDING TRAINING OPPORTUNITIES

The Vocational Education Amendments of 1968 are very closely aimed at expansion and extension of vocational education to more individuals, specifically to those who are disadvantaged. The Act also places emphasis upon those occupations for which training has not been generally available. In effect, it directs program-planners to identify the individuals who want and need cooperative vocational education and then design a program suited to their needs and interests. Part G further encourages the development of programs for the "hard core" disadvantaged by including provisions for reimbursing employers for added training costs to make these individuals employable. The instruction and training is not limited to the traditional vocational education fields; rather it is to be tailored to student needs and available occupational opportunities.

Several possible ways of extending occupational training opportunities are (1) reimbursing employers for certain costs, (2) obtaining assistance from other agencies, and (3) utilizing student-learner wage plans. These add new dimensions to the responsibility of supervising the participation of employers and require well defined policies and procedures for implementation.

Extending Training Opportunities to Additional Occupations

1. The Vocational Education Amendments of 1968 strongly encourage the development of cooperative vocational education for new occupations in addition to the traditional programs in agriculture, distributive, health, home economics, office, and trades and industry occupations.
2. Program planning should start with an identification of the individuals who can benefit from cooperative vocational education and then proceed to design a program which is tailored to their needs and occupational interests and aptitudes.
3. Training opportunities may be extended by reimbursing employers for added costs of training students under Part G; however, the school must have well-defined policies and procedures for identifying such costs and determining the eligibility of employers for such reimbursement.
4. Cooperative planning among the many private and public agencies engaged in manpower training and welfare services is necessary to to insure that the most important needs are met in the most efficient ways.
5. Cooperative vocational education should include preparation for occupations in public service agencies as well as in private industry.
6. Training opportunities can be extended to include employers who find it difficult to pay required minimum wages by obtaining student-learner certificates from the Wage and Hours and Public Contracts Division of the U.S. Department of Labor.

Reimbursing Employers for Certain Costs.

The provision in Part G of the 1968 Amendments for reimbursing employers "when necessary for certain added costs incurred in providing on-the-job training through work experience" applies *only* to the employers of students who are enrolled in programs under Part G. The policies and procedures for administering this provision must assure that the costs to be reimbursed are costs that are above the usual costs of training a new employee. The Amendments are not explicit as to what costs might be included or what formula is to be used in determining the amount of reimbursement. Therefore, unless a state plan specifies a uniform policy for schools, local administrators and coordinators are responsible for developing a policy which is acceptable to the state authority which approves local applications.

Policy Suggestions. Some of the following policies have been suggested by vocational educators as ways of administering the provision for reimbursement of employers:

1. Only the added costs which the employer has not assumed previously in training employees should be considered for reimbursement.
2. Added costs should be identified prior to employment of the student and specified in a written training agreement indicating:
    a. The cost factor applied
    b. Amount of funds required for each cost factor and the total amount to be paid to the employer
    c. The duration of the reimbursement period or a specified level of student performance when reimbursement terminates.
3. Employers should be reimbursed through the local school district at the end of the school year in which the costs were incurred. A report should be made that includes a record of costs and the total amount reimbursed.
4. Payment for added costs to employers for on-the-job training of students should be made only when it is apparent that without such reimbursement employers will not be able to provide quality on-the-job training. Normal costs in assimilating new employees into work assignments should not be considered added costs.

Categories of Costs. Provisions for the reimbursement apply only to students in programs under Part G, thus this funding is intended primarily to reimburse employers who agree to train students with low employability skills. Although there is not much evidence to show that these students will require specialized training, the reimbursement feature may be an incentive for employers to provide special help when it is needed. Some possible categories of reimburseable costs are:

1. *Additional* time required of training sponsors to train these students
2. Salaries of special personnel whose sole responsibility is supervising, training, and counseling a number of students enrolled in the program

3. *Additional* clerical help required to maintain records
4. *Additional* special instructional materials or equipment needed
5. *Additional* tax or insurance expense for these students
6. Costs of special training sessions not normally required in training new employees
7. *Additional* time required for training sponsors to receive training applicable to working with students with low employability skills.

Precaution. Unless it is clearly demonstrated that the employer has incurred unusual costs which he should not be expected to assume in training students with subminimal skills, it will be difficult to justify reimbursing some employers and not others. Program-planners are encouraged to consult with their advisory committees and carefully think through the policies for reimbursing employers for costs of training students.

Cooperation with Other Agencies

The 1968 Vocational Education Amendments strongly encourage cooperative planning among the public educational institutions and other agencies in facilitating the vocational preparation of all individuals. Since the early 1960's anti-poverty programs and various other attempts to provide occupational preparation have been instigated by a number of agencies under local, State, and Federal government programs, as well as by private and voluntary service groups. There are many services and training opportunities for the disadvantaged, the handicapped, the unemployed and others who were unable to qualify for adequate income jobs. Coordination and cooperative planning among these agencies and the school are necessary to insure that the most important needs are met in the most efficient ways.

With the increasing number of government jobs and the opportunities for employment in public service occupations there is a great need to train young people for public service jobs. Whereas, in the past, participating employers in cooperative vocational education were almost entirely in private industry, schools are now encouraged to develop new programs to train individuals for public service occupations. Agencies such as the following may participate in cooperative vocational education to prepare individuals for careers in public service:

1. Public schools, libraries, parks, recreation centers, hospitals and other local government sponsored services
2. Agriculture services such as food inspection, experimental farming and reporting services
3. Conservation services
4. Public employment services
5. Health services
6. Correctional institutions
7. Public welfare services for the handicapped, the aged and for indigent welfare groups

The examples given are only a few of the many opportunities for participation of public employers. The occupations could be in office work, in maintenance, in personal contact, or in assisting specialists in some of the agencies. Many young people are interested in social service careers and the need for young workers in these fields will continue to grow. Individuals who are members of minority groups or who have lived in ghetto areas may be particularly qualified and interested in working with welfare agencies in their communities.

Student-Learner Certificates

The provisions for student-learner certificates are not new; however, they should be considered in any discussion of extending occupational training opportunities. An employer may apply for these certificates which allow him to pay as low as 3/4 of the Federal minimum wage to student-learners who are enrolled in bona-fide vocational education programs and receive on-the-job instruction supervised by the school. An application form is submitted to the Regional Office of the Wage and Hours and Public Contracts Division of the U.S. Department of Labor by the employer with the assistance of the coordinator. The application form is a written account of the arrangement which describes the type of training to be provided, the duration of the training period, and verification that the student-learner is enrolled in vocational instruction for the job he is learning. Many states also have provisions for student-learner certificates for jobs which are not subject to Federal laws, but which come under state minimum wage regulations.

The payment of less than the minimum wage to students generally has not been favored by vocational educators or by many participating employers for most entry level jobs. Neither the coordinator nor the employer wishes to be criticized for exploiting students by paying less than minimum wages unless there is convincing evidence of higher training costs. Also, the difference between the required minimum wage and the lower rate has not been great enough to risk the effect of paying the lower rate on the attitude of the student. The provision, however, may make it possible to expand training opportunities by obtaining participation of employers in smaller firms and in rural communities where businesses would not ordinarily employ part-time students. It may also expand training opportunities for more highly technical jobs which require extensive on-the-job training before a learner is capable of fully productive work.

The special student-learner minimum wage payment is permitted only for the training period. The provisions for student-learner certificates are further explained on page 76.

MAINTAINING STANDARDS OF LEARNING

The major purpose of cooperative vocational education is to learn; to earn is secondary, although essential in order for the learner to participate in the program. A program can become a work-experience program with very little learning if the students are not paid for their work and if the teacher-coordinator fails to maintain high standards for learning. An educational program is expected to contribute to student growth and the acquisition of competencies which the student did not possess prior to entering the program. The desired learning outcomes of cooperative vocational education are achieved by cooperative planning between the teacher-coordinator, the employer and the student, and by continuous evaluation and follow-up activities.

Maintaining Learning Standards

1. The educational value of cooperative vocational education is maintained by working closely with competent on-the-job "instructors" in planning, conducting and evaluating on-the-job learning experiences. The term "training sponsor" is used to identify the on-the-job instructor.
2. Criteria should be established for the selection of training sponsors who are competent in the occupation to be taught, who can train others, and who are willing and able to work with students in achieving the learning objectives.
3. Coordinators should provide a program of sponsor development to assist training sponsors in improving their training effectiveness. The program should include orientation meetings, training sessions, and the use of printed guidelines, in addition to the regular student follow-up calls. In such calls the coordinator offers suggestions to the training sponsor.
4. A written training agreement signed by the employer, the student, his parents, the coordinator, and possibly another school official is a businesslike way of communicating the program objectives and policies and of obtaining the commitment of the concerned parties to maintaining standards of learning.
5. The coordinator should work with each employer and training sponsor in developing a written training plan for each student that lists the on-the-job learning experiences and related classroom instruction to be provided.
6. Periodically, students and their training sponsors should complete training profile forms which indicate the amount of training that was given in the competency areas specified in the original training plan.
7. The evaluation of student achievement should measure his progress in performance of the job tasks for which instruction and training were provided. The coordinator, the training sponsor, the employer, and the student should participate in the evaluation.

Establishing Criteria for Training Sponsor Selection

Selection of the individuals who will conduct the actual on-the-job training and supervise the cooperative vocational education student at work is critical to the quality of the learning experience. This training sponsor *may* be the employer or manager of a firm, but more often is a supervisor or experienced employee who can work closely with the student at all times. The coordinator (teacher-coordinator) who knows the student well, and the employer who knows the capabilities of his employees, together select the training sponsor who will be responsible for the student. Some suggested criteria for selection of a training sponsor are:

1. Technical competence in the occupation to be taught

2. Ability to organize and conduct job instruction training
3. Worthy personal traits and work habits which the student can emulate
4. Ability to communicate and relate to superiors, co-workers, and subordinates
5. Interest and attitude toward training and toward the type of student who will be enrolled
6. Specific skills or attitudes required in working with students having special needs (e.g., slow learner, or student who lacks self-confidence)
7. Willingness to work with the school coordinator in planning instruction and evaluating student progress.

In some training stations a new training sponsor will be designated when a student is rotated from one job or department to another. It is essential that careful attention is given to the selection of each training sponsor because students tend to form an opinion about the occupation from their experiences with supervisors.

Providing a Program of Sponsor Development

Training a cooperative vocational education student will be a new experience for many training sponsors. Even though they are carefully selected because of their potential ability, training sponsors are usually more effective in their roles when they are given special help by the coordinator (teacher-coordinator) in how to train students.

Orientation to Cooperative Vocational Education. The training sponsor should be included in the early planning sessions with the employer and the coordinator so that he understands the purpose of the cooperative arrangement and the role he has to perform in achieving its objectives. A printed guideline describing the program and the duties of the training sponsor is valuable in communicating information that will be helpful to him. In firms where there are several training sponsors, or in communities where it is feasible to have training sponsors meet as a group, a luncheon meeting is a good way to foster group enthusiasm for working together to provide good on-the-job training. Training sponsors take pride in their responsibility when the coordinator gives public recognition for their contributions. The group meetings provide opportunities to discuss common problems, as well as to recognize the importance of the training sponsor's role.

Training Sessions. Some individuals who are very competent in their occupational field have difficulty in teaching others to perform the work. They often tend to assume that the learner can perform a task after being told and shown once how it should be done. Time taken to educate the training sponsor in methods of analyzing tasks to be taught and in using the step-by-step method of (1) preparing the learner, (2) presenting the material, (3) applying the learning, and (4) checking on learning, will result in better job instruction for students. The coordinator (teacher-coordinator) can make a contribution to the training efficiency of a firm by training supervisors to be better job instructors. The training sponsor usually will derive satisfaction from doing a more effective job of teaching.

Training sponsors may not be experienced supervisors who know how to manage human relations and how to relate to the students whom they supervise. The coordinator can help many training sponsors to become more successful in their relationships with students, as well as to be better supervisors, by providing human relations training. The training sessions usually can be conducted at one of the training stations or at some convenient meeting place such as the school or local Chamber of Commerce meeting room.

Follow-up Calls. The coordinator (teacher-coordinator) works with individual training sponsors on his periodic calls to the training station. The training sponsor should be encouraged to discuss any problems which the student might be having in making a satisfactory adjustment. The coordinator may suggest alternative ways of dealing with problems or provide information which helps the training sponsor to solve them. Periodic reviews of the student's progress help the training sponsor determine when the student is ready for new experiences and keeps the focus of the program on instruction and learning. The master coordinator makes suggestions on training, and at the same time recognizes the contribution and achievements made by the training sponsor.

Preparing a Training Agreement

The coordinator must make a continuous effort to maintain a training emphasis in cooperative vocational education programs. This is partly achieved through the training agreement. The training agreement is a written statement of the training commitment which is expected of each of the parties involved – the employer, the school, the student, and the parents. Although it is not treated as a legal contract, it is a businesslike way of coming to an agreement on the responsibilities of the concerned individuals. The training agreement should be signed by each of the parties mentioned and a copy should be given to each of them at the time the student is placed on the job. The following kinds of information should be included in the training agreement:

1. Statement of the program purposes
2. Career goal of the student
3. Occupation(s) to be taught
4. Duration of the training period
5. Schedule of work and school (minimum and maximum hours of work)
6. Beginning wages and possibly conditions for increases in wages
7. Employer responsibilities
8. School and teacher-coordinator responsibilities
9. Student responsibilities
10. Training plan (this may be a separate document or the plan may be broadly outlined in the agreement and a more detailed plan completed later.)

A sample training agreement is shown on page 69.

COOPERATIVE VOCATIONAL EDUCATION TRAINING AGREEMENT *
PROGRAM ______________________________

This training agreement is to (1) define clearly the conditions and schedule of training whereby student Name: ______________________________

is to receive training in ______________________________

and (2) serve as a guide to the cooperating parties: the ______________________________
(COMPANY OR AGENCY)

and the ______________________________

Public Schools, in providing the student with opportunities for education and training in the basic skills of the occupation and the technical information related to it. In order that a systematic plan which provides for well-rounded training can be followed, a schedule of work experiences and a course of study paralleling it have been worked out and agreed upon by the employer and representative of the school.

The student agrees to perform diligently the work experiences assigned by the employer according to the same company policies and regulations as apply to regular employees. The student also agrees to pursue faithfully the prescribed course of study and to take advantage of every opportunity to improve his efficiency, knowledge, and personal traits so that he may enter his chosen occupation as a desirable employee at the termination of the training period.

In addition to providing practical instruction, the employer agrees to pay the student for the useful work done while undergoing training according to the following plan:

1. The beginning wage will be $ ________ per ________ for ________ hours per week, which amount is approximately ________ per cent of that paid competent full-time employees in the same occupation in the community.
2. A review of the wages paid the student will be made jointly and periodically by the employer and coordinator at least once each semester for the purpose of determining a fair and equitable wage adjustment consistent with the student's increased ability and prevailing economic conditions.

The training period begins the ____________ day of ____________________, 19___, and extends through 19___. There will be a probationary period of ______ days during which the interested parties may determine if the student has made a wise choice of an occupation, and if the training should be continued.

This plan has been reviewed and recommended by the Local Advisory Committee. It may be terminated for just cause by either party.

Approvals:

______________________________ (STUDENT)	______________________________ (NAME OF EMPLOYER)
______________________________ (PARENT OR GUARDIAN)	______________________________ (NAME OF COMPANY OR AGENCY)
______________________________ (CHAIRMAN, LOCAL ADVISORY COMMITTEE)	______________________________ (TEACHER-COORDINATOR)

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*Adapted from the form developed by the Department of Vocational Education, Texas Education Agency.

ADDENDUM TO TRAINING AGREEMENT*

1. *Added Training Costs*
    a. Identification of cost factors
    b. Justification for each
    c. Amount of funds involved
    d. Duration of reimbursement
    e. Agreement features
2. *Student Costs*
    a. Identification of items or services required for employees in the occupation
    b. Justification of each
    c. Cost of each
    d. Agreement features
3. *Other* (as determined by State and/or local educational agency)

For programs in which the employer is compensated for certain added costs of training under Part G of the Act, items concerning the costs given on page 63 should be included in the agreement. Also, if the agreement includes job-related expenses of a student, such as those mentioned on page 63, these items should be included. These items can be set up as an addendum to the regular training agreement.

Developing a Training Plan with the Employer

The purpose of the training plan is to organize the instruction and to correlate classroom learning and on-the-job training. The teacher-coordinator, the employer, the training sponsor, and sometimes the student, together determine the specific learning experiences which will be provided on the job and the specific related learning which will be covered in school. A general plan for the job rotation and sequencing school instruction will serve as a guide in correlating on-the-job training and classroom learning.

The student's tentative career objective, a knowledge of his readiness for different kinds of experiences, and a detailed analysis of the competencies needed for the occupation are necessary to develop a training plan for an individual student. The coordinator is expected to know what skills and knowledges the student already possesses and what kinds of learning experiences he is capable of handling in his first job assignments. It is very important that the early on-the-job experiences provide opportunities for the student to experience a sense of achievement and growth because these are the factors which are the source of his motivation to learn.

The employer and training sponsor should be able to specify the learning experiences which lead to occupational competence; however, the coordinator may have to provide check-lists or a general outline of possible on-the-job experiences from which the employer and training sponsor designate the areas of instruction which they can provide. Then they add those experiences which are unique for the specific job and work situation. The sequence of learning experiences should show some progression from the simple to the complex. Once a workable plan is developed for a student in a specific training station, it can be adapted for other students who are placed there or in similar jobs. The training plan, however, should always be adapted to the specific training station and the individual student.

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*To be included when necessary and only for Part G programs

COOPERATIVE VOCATIONAL EDUCATION TRAINING PLAN

Student ______________________________ Firm ______________________________

RELATED CLASSROOM INSTRUCTION AND INDIVIDUAL STUDY PROJECTS	EVALUATION	SCHEDULE OF TASKS TO BE LEARNED AND PERFORMED ON-THE-JOB	EVALUATION
Period from ______ to ______		Period from ______ to ______	
1.		1.	
2.		2.	
3.		3.	
Period from ______ to ______		Period from ______ to ______	
1.		1.	
2.		2.	
3.		3.	

The training plan is always subject to change as the student progresses through the program and his strengths and weaknesses are uncovered. The coordinator and the training sponsor will often find it necessary to alter and add to the original plan. A time schedule of job rotation is a good thing to have in the plan, but with the understanding that the student is rotated when he achieves satisfactory performance. The training plan should include items such as the following:

1. A listing of the on-the-job learning experiences which the student will receive
2. Space for entering the periodic employer's rating of the student's performance on the job
3. Space for indicating which of the on-the-job learning experiences are correlated with classroom instruction and individual study projects.

Administering the Training Profile

A training profile is a form on which are listed the on-the-job learning experiences. These tasks and responsibilities closely correspond to those listed on the training plan. Periodically, at the end of a quarter or semester, the student and the training sponsor indicate on the profile form the degree to which learning experiences have been provided in each competency area. Most forms have a rating scale for each item on the list, and on separate forms the student and the training sponsor mark on the scale their perception of the amount of training that was completed. The points on the scale might range from "no training" to "a great amount of training." Some forms have space to enter the number of hours of training received in each competency area.

DISTRIBUTIVE EDUCATION PROFILE
(Abbreviated Sample)
Measuring Degree of Training

Training Station ______________________ Student's Name ______________________

Job Assignment ____

Student's Career Objective ______________________________________

Procedure: For each statement, circle number

1 if you have had *no* training

2 if you have had *very little* training

3 if you have had *adequate* training

4 if you have had *a great amount* of training

I. REQUIRED KNOWLEDGE

1 2 3 4 1. Where to find and how to use reference materials
1 2 3 4 2. (1)

II. BASIC AND REGULAR CYCLE OF DUTIES AND RESPONSIBILITIES

1 2 3 4 1. Filling out regular stock orders
1 2 3 4 2. (1)

III. PREPARING MERCHANDISE FOR SALE

1 2 3 4 1. Ticketing new merchandise
1 2 3 4 2. (1)

IV. SELLING AND SERVICE TO CUSTOMERS

1 2 3 4 1. Making sales on the telephone
1 2 3 4 2. (1)

V. SALES PROMOTION

1 2 3 4 1. Suggesting tie-in sales
1 2 3 4 2. (1)

VI. PERIODIC DUTIES

1 2 3 4 1. Assisting in taking annual and spot inventories
1 2 3 4 2. (1)

VII. ADDITIONAL

1 2 3 4 1. (1)
1 2 3 4 2. (1)

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[1] Other items to be filled in by teacher-coordinator and training sponsor

The training profile serves several important purposes. It makes the student aware of the training objective and stimulates his interest in learning. Job tasks take on added significance when the student views them as a part of the total training experience. He develops the ability to organize the learning of a job which is very important when learning future jobs.

The training sponsor benefits from completing a profile because in this way he takes stock of how the training is progressing and determines which learning experiences to plan for the next period. If he has the opportunity to see the form which the student completes he sometimes learns that the student feels inadequately trained in an area which he felt was adequately covered. This alerts him to needs for retraining or making some changes in the training procedure.

The coordinator utilizes the training profile to measure the student's progress in the training plan. It gives him some indication of whether or not the training plan is being followed. It also reveals the student's evaluation of the quality of the learning experiences. From this he gets cues to provide special individual help for the student or to give suggestions to the training sponsor for improving the training. In addition, the completed training profiles are helpful in evaluating training stations for continued participation in cooperative vocational education.

Evaluating Student Achievement

Student progress in acquiring occupational capabilities and competencies is the basis for evaluation in cooperative vocational education. In order to evaluate achievement fairly and reliably it is essential that before the training and instruction is undertaken the following steps are completed:

1. The vocational capabilities and competencies which are needed to perform the occupation are identified.
2. The student's level of proficiency in occupational capabilities and competencies prior to entering the training program is known.
3. Clearly defined objectives and expected levels of performance are known by the student, the training sponsor and the teacher-coordinator.
4. The on-the-job training experiences and related instruction are planned to develop the capabilities and competencies to be evaluated.

Evaluation is a measure of the degree to which the student has achieved the objectives of the training and instruction. The purpose of evaluation is to determine whether or not the student is competent in the occupation, to verify that the learning experiences were effective in developing occupational capabilities and competencies, and to identify areas of strengths and weaknesses in order to plan further instruction.

There are job proficiency tests for some occupations; however, in the absence of appropriate measures of objectives, a rating sheet is used to record the evaluator's judgment of the student's proficiency in occupational competencies and work habits. The major criticism of many rating sheets is that they often do not match the training objectives and correlate with planned instruction. They are often only an assessment of generalized work habits, such as neatness, punctuality and appearance. The rating sheet should also contain items which describe the degree to which the student has mastered occupational competencies, such as "administers baths to patients," or "sets type for printing jobs." An evaluation sheet which provides space for comments and asks the rater for behavioral descriptions rather than scale points ranging from "poor" to "excellent" is useful in determining what the student has learned to do well and what areas require further training and instruction.

Initially training sponsors and employers should not be expected to complete rating sheets without the help of the coordinator. The latter should be present when the training sponsor undertakes the first few evaluations in order that strenghts and weaknesses in the student's performance can be discussed and plans can be made to improve deficiencies. The rating sheets may be used only at 6 to 9-week intervals; however, the coordinator will need to inquire about a student's progress on each of his regular coordination calls.

Students should also participate in evaluation, and periodically rate *themselves* on the same types of forms which the employer or training sponsor completes. Their self-evaluations may be compared with the training sponsor's evaluation and differences in ratings discussed. Some training sponsors may prefer to have the student present when the rating sheet is being completed. Otherwise, the training sponsor should be encouraged to review job progress with the student periodically in order that each understands the other's expectations and so that they can work together for the student's optimal occupational development.

One of the most important steps in evaluation is the teacher-coordinator's follow-up interview with the student. Recognition of achievement is a significant source of motivation for the student to continue doing good work. Knowledge of deficiencies is essential before the student can seek to improve his performance.

COMPLYING WITH LABOR LAWS

Any infringement of labor laws is certain to give cooperative vocational education a poor image. The coordinator is expected to know the local, State and Federal labor regulations that apply to students and the training stations where they are placed. It is not the function of the coordinator to serve as a law enforcement officer, but he is expected to inform participating employers when they are unknowingly violating regulations. If an employer refrains from complying with the law the coordinator should discontinue the cooperative arrangement and seek another training station for the student. Problems of violations of labor laws are best avoided by selecting suitable training stations and by drawing up a written training agreement which specifies conditions that insure compliance with regulations.

Labor Laws

1. Students enrolled in cooperative vocational education and receiving on-the-job training are subject to the provisions of all local, State and Federal labor laws, unless exempt by special application and approval.
2. The coordinator is expected to know the regulations which apply to the students, the occupations and the participating training stations.
3. The principal kinds of regulations pertain to: (1) age restrictions, (2) minimum wages and overtime pay, (3) hours of work, (4) hazardous occupations, (5) insurance, and (6) minimum wage exemptions for student-learners.
4. The coordinator does not enforce the laws; however, he informs the employers of provisions which apply to students and avoids placing students in training stations which do not comply with the laws.
5. Failure to comply with labor laws is damaging to the image of the program and, in instances where students' health or safety are impaired, make the coordinator vulnerable to criticism, or even legal action.
6. Information on labor laws should be obtained from the regional office of the Wage and Hours and Public Contracts Division of the U.S. Department of Labor, and from the appropriate State Department of Labor.

Federal Labor Laws

The Fair Labor Standards Act provides minimum wage and overtime standards, requires equal pay for equal work regardless of sex, and contains certain child labor standards. Coordinators and supervisors of cooperative vocational education should contact the nearest local or regional office of the Wage and Hours and Public Contracts Division of the U.S. Department of Labor to obtain up-to-date information on provisions and requirements and to get assistance in determining the application of the law to the employment of students.

This Federal "Wage and Hour Law" applies to workers engaged in interstate or foreign commerce, or in the production of goods for such commerce, and to employees in certain enterprises so engaged. A large portion of the students in cooperative vocational education are in occupations covered by the Act. An employer is expected to know if the Federal Wage and Hour Law applies to his employees; however, the coordinator should know which occupations and types of enterprises are covered by the law and make certain the law is not violated in the employment of students.

Wages. The minimum wage rate for employment covered prior to the 1966 Amendments to the Fair Labor Standards Act is $1.60 per hour. Some workers who were newly covered as of 1966 must receive $1.30 minimum, but will be subject to the $1.60 minimum by February 1, 1971. Agricultural workers on large farms must be paid at least $1.30. The law requires not less than time and one-half for all hours worked in excess of 40 per week, except in the case of agricultural workers. Students, unless exempt, are subject to the minimum wage and equal pay provision.

Special Minimum Wages. Most employers pay cooperative vocational education students not less than the statutory minimum for their on-the-job training and have not found it necessary to apply for the special student-learner minimum wage rates. When exceptions are requested, they are *not* approved if:

1. The occupation does not require a sufficient degree of skill to necessitate a substantial learning period.
2. Another worker is displaced.
3. Wage rates or working standards of experienced workers would be depressed.
4. The occupational needs of the community or industry do not warrant the training of students at less than the statutory minimum.
5. There are serious outstanding violations of the Fair Labor Standards Act.
6. The number of students at certificate rates is more than a small proportion of the establishment's working force.

Special minimum wage certificates for students contain certain age, wage, hours, and record-keeping requirements.

1. Age: At least 16
2. Wage: Not less than 75 percent of the statutory minimum
3. Hours: In general, the hours of work permitted at certificate rates plus the hours of school instruction (not including study hall, homeroom and activity periods with no academic credit) may not exceed 40 hours a week. If school is not in session, such hours of employment training may not exceed 8 a day or 40 a week.
4. Records: Each student paid certificate rates, and his occupation and rate of pay should be identified in the payroll records, which should also note when additional hours are worked at certificate rates because school was not in session. The application should be retained for 3 years.
5. Application: An application for a special minimum wage certificate is filed for each student with the regional or district office of the Wage and Hours and Public Contracts Division. It is signed jointly by the employer, a school official, and the student. Among other things, it gives information on: the employment training and related school instruction to be provided, the certificate rates needed and for what period of time, and the age of the student.

Age. Under the Fair Labor Standards Act, 16 years is generally the minimum for employment in any occupation other than those nonagricultural occupations declared hazardous by the Secretary of Labor. Eighteen is the minimum age for employment in hazardous occupations. At this time, minors, 14 and 15-year-olds, may not be employed during school hours but may be employed in some occupations outside of school hours for limited daily and weekly hours, but not before 7 a.m. or after 7 p.m.

Hazardous Occupations. There are provisions for 16 and 17-year-olds to be employed in certain hazardous occupations, provided they are enrolled in cooperative vocational education under supervision of the public schools. There are certain conditions which must be met by the coordinator and the employer. The requirements for exemptions are described in detail in Child Labor Bulletin No. 101, available from the Wage and Hour and Public Contracts Division. The coordinator should verify that the conditions meet with the requirements in any training station where 16 and 17-year-olds are engaged in any hazardous work activity. In certain kinds of farm employment, students, 14 and 15 years of age, can be employed in occupations classified as hazardous, provided exemption conditions are met. The regulations are flexible and require that the coordinator and the employer exercise a considerable amount of judgment in determining a student's readiness to handle potentially hazardous job tasks.

State Labor Laws

Every State also has a child labor law which applies to students in cooperative vocational education. The coordinator should keep up-to-date copies of these regulations available and know how they apply to students. State laws have similar regulations to Federal laws and usually cover all occupations. In some states there are provisions for special minimum wages for cooperative vocational education students and for exemptions on hazardous occupations. Again, there are conditions which the coordinator would need to verify. State standards may differ from those in the Fair Labor Standards Act, in which cases the higher standard must be observed. The State Department of Labor can provide information on State laws.

SUMMARY

With few exceptions, teacher-coordinators claim that employers are sincerely interested in cooperative vocational education and willing to carry out their responsibilities in the program once they have committed themselves to it. Most of the problems concerning their inadequacy in providing the proper learning environment for students that do arise stem from misunderstandings due to their having inadequate information. Coordinators are hard pressed to communicate relatively large amounts of information about the program and their students in the time allotted to them for coordination work.

Good coordinators agree that it usually takes several years to develop a first-rate training station. In response to this condition many of them carry on a carefully planned educational campaign among cooperating employers. They use a checklist of essential information which they direct individually to each employer in well calculated measures over a period of time. Between calls on regular cooperating employers they call on potential training stations in an attempt to develop a reserve for worthy student applicants.

In addition to serving as a source of potential full-time employees, sophisticated coordinators furnish cooperating businesses and organizations with other valuable services. Coordinators are professional educators with practical experience in the occupational areas they teach and special training in the supervision and education of young workers. As such they bring to receptive employers an expertise on employment, supervision and training which many of them appreciate and use in their relations with regular employees.

Chapter V

ESTABLISHING ADMINISTRATIVE RELATIONSHIPS

ESTABLISHING PERSONNEL INTERRELATIONSHIPS

Cooperative vocational education requires inputs from a number of sources in order to achieve the desired objectives. A good teacher-coordinator is one who is able to establish smooth working relationships with vocational and academic faculty members, supervisory and guidance personnel, the special services staff of the school and those outside of the school who participate in the program. The program coordinators and supervisors are responsible for coordinating the efforts of the various individuals and groups; however, personnel interrelationships depend greatly on the interest and leadership of top administration in the schools.

School Personnel Relations

1. Excellent working relationships with the entire faculty are essential in developing and maintaining a successful program.
2. The teacher-coordinator must keep the faculty well posted on the program. He should seek their assistance in informing students about it, draw on their special abilities in providing instruction, and recognize their contributions to the total vocational development of students.
3. The teacher-coordinator should help guidance and supervisory personnel understand cooperative vocational education so that they can perform better the functions that are related to the program – guidance, student referral, and program development.
4. The teacher-coordinator should participate in the formal and informal faculty activities in order to establish good faculty relations. He should contribute to the total school effort in providing a good educational program for all students.

Importance of Good Faculty Relations

Lack of understanding of the purposes of cooperative vocational education on the part of individuals within the school can impede the development and operation of a program. The image of cooperative vocational education within the school is a reflection of the attitudes of faculty members. Unless they understand the program and feel that it has good educational value, they are not likely to give their much needed support. Without their support and involvement, the program can come to be regarded as a last resort for students who have not succeeded elsewhere in school. Even though cooperative vocational education frequently may serve the needs of alienated youth better than regular classroom instruction, it is unfortunate for the students who enroll, or for those who would like to enroll, if the program is looked down upon in relation to other programs of study. The endorsement by the total faculty is vital to the success of cooperative vocational education.

Sometimes the coordinators in large school systems have difficulty in personally contacting each student in the school. When the teachers are knowledgeable about cooperative vocational education and the benefits that accrue from it, they can encourage students to investigate the opportunities it offers. The coordinator who keeps the faculty informed and gives the members recognition for their contributions to the program is very likely to have a program that is well known and favorably regarded among the members of the student body.

Faculty members outside the department have important contributions to make to the vocational development of students. The coordinator may, or may not, teach the job-related vocational classes. In either case, he often must seek the help of other teachers in getting special types of instruction for his students. A teacher-coordinator of cooperative trade and industrial education may have a student who needs special help with math, which a qualified math teacher can best provide. If other teachers on the faculty feel that they have a part in the total vocational development of students usually their assistance is more enthusiastic.

Establishing cooperative relationships is partly a result of the personality of the teacher-coordinator; but it is also a matter of following good procedures. There are steps all coordinators can take to foster good interpersonal relations. The following general suggestions may be considered in arriving at an appropriate procedure.

1. Coordinators should keep the administrator and all of the faculty members informed of program developments, student progress, and other information that is of concern to them.
2. Coordinators should participate whenever feasible in the formal and informal organizations, groups, and committees involving fellow teachers.
3. Coordinators should elicit the assistance of other teachers in program operation and give due recognition for their contributions.
4. Coordinators should make their own services and unique capabilities available to their colleagues when it is feasible. (e.g. provide occupational information for all students)

Establishing Relationships with Guidance and Supervisory Personnel

Vocational educators frequently are critical of counselors because many of the counselors seem to devote their major efforts to helping college-bound students. Coordinators often feel that counselors do not direct capable students to vocational education. School supervisory personnel have also been criticized for placing greater emphasis on the college preparatory curriculum than on vocational preparation. Seemingly they have measured the educational success of their school system in terms of the number of students who enter college. Such indictments are an injustice to many individuals working in guidance and administrative positions. Successful coordinators usually look at the academic prestige barrier in the following manner. They understand that the attitudes of their academically oriented colleagues reflect the values which a large segment of society has placed on college preparatory and liberal arts education. It is a natural phenomenon for academically prepared school personnel to believe that every student who is capable should get an extensive academic education and not be greatly concerned with vocational preparation. Hence an important part of the coordinator's job is to convince guidance and supervisory personnel of student needs for vocational preparation as well as for a good general education.

The attitudes and vocational orientation of guidance and supervisory personnel vary greatly among schools and communities. Such differences are due largely to the relationships of vocational educators with administrators and counselors. If cooperative vocational education coordinators really want the support and assistance of other personnel, they must take definite steps to develop understanding and cooperative working relationships. In schools where coordinators have had good relationships, a number of the following practices have been employed:

1. Supervisory and guidance personnel participate in the initial planning of cooperative vocational education programs.
2. Their advice and assistance are solicited on such matters as scheduling, counseling, recruitment, selection, program development, and evaluation.
3. They are kept informed by the coordinator regarding program activities, students' progress, business and industry reactions to school programs, local occupational opportunities and other relevant information.
4. They learn how cooperative vocational education is conducted by means such as personally accompanying the coordinator on calls to training stations, observing job-related vocational classes, attending advisory committee meetings and student club functions, and talking with students who are enrolled in the program.
5. They are brought into contact with employers and employees in business and industry through coordinator-planned field trips, meetings with representatives from the employment community and resource speakers brought into the school.

These are only a few suggestions which have been tried and found to be effective in establishing cooperative relationships. It is essential that coordinators recognize that many problems concerning cooperative vocational education exist as a result of insufficient understanding of the program. They must make a continuous effort to keep other faculty members, administrators, and guidance personnel *informed* of what is happening in cooperative vocational education and *involved* in a total school effort to provide for the optimum career development of all students.

WORKING WITHIN THE ADMINISTRATIVE ORGANIZATION

The administrative organization of institutions which provide cooperative vocational education varies considerably with the size and type of school. In a small school a coordinator may be directly responsible to the superintendent, but in a large system a director of vocational education or the principal of a school may be the coordinator's administrative contact and source of authority. It is essential that a cooperative vocational education program have the full support of the top administrative body in the institution because of the inherent need for total community backing and because of the line of the special authority in dealing with State Boards of Vocational Education on matters of financial support and supervision.

Administrative Relations

1. Coordinators usually are expected to take the leadership in formulating the policies and procedures of operating cooperative vocational education programs. The school administration should condone these policies and support the coordinator in carrying them out.
2. Administrators must be kept informed of Federal rules and regulations and State policies and procedures pertaining to program operation and reimbursement so that administrative decisions may be made within that framework.
3. Cooperative vocational education policies and practices should be consistent with the philosophy of the school and with sound educational practices.
4. There should be a written document which outlines the major policies and practices to be followed in operating a program. It should be approved and endorsed by the administration.
5. Local advisory committees should be consulted in developing policies and practices because their approval enhances the likelihood of program acceptance by other groups in the community.
6. Student participation in determining policies and procedures is recommended because it helps to keep programs relevant to student needs and stimulates their desire to learn.

Establishing the Origins of Policies and Practices

Cooperative vocational education cannot be conducted effectively without consistent policies and procedures. The coordinator(s) usually are expected to provide the initiative for formulating these essentials. The principal school administrator, people who participate in administration, including the school board, and frequently the advisory committee, should approve whatever major program decisions are made. The top school administration is responsible to the community and the State Board of Vocational Education for the effectiveness and efficiency of cooperative vocational education; hence there should be sincere concern about the policies and practices adopted by the school.

In effect, the State Board of Vocational Education has considerable influence over certain operating policies and procedures through its authority to approve or disapprove local programs for reimbursement. The State Board makes decisions within the framework of the enabling legislation which is interpreted in part in the Federal Rules and Regulations. In addition, each State formulates a State plan which describes its policies and procedures. In light of these conditions, local policies and practices must be determined with full knowledge of how they affect the reimbursement arrangements. Fortunately Federal regulations and State policies usually are general and broad enough to allow local schools substantial autonomy in the design and operation of specific programs.

School personnel who are responsible for developing the cooperative section of the local application for vocational education funds should be well-informed about Federal and State program requirements. The school administrators usually expect the coordinator to know the reimbursement provisions. The responsibility for satisfying the requirements usually rests with the coordinator even though the local administrator is legally responsible.

Policies and procedures concerning cooperative vocational education must be consistent with the general philosophy of the school which reflects the community's expectations. Hence, the school administrator, who must answer to the community, usually through the school board, wants all members of the school staff, including the coordinator of cooperative vocational education, to operate in harmony with that philosophy.

Policies and procedures which originate from the coordinator should be communicated and approved by the administration. When determining what policies and procedures are to be adopted the top school administrator or his representative should be involved. Then a written document which specifies the conditions under which the program will operate should be endorsed by the total administration as the local plan of cooperative vocational education. In schools where there are several sections of cooperative vocational education, one plan, with specific provisions for the various sections of the program, is recommended.

The advisory committees, which have no administrative authority, should have the opportunity to recommend certain program policies and procedures. Approval of the written plan by this supporting group strengthens the school's position in the community, particularly in dealing with employer and labor groups.

Student Participation in Certain Administrative Activities

Business, industry, colleges, and the public schools are now including in their policy formation process those individuals who are administratively affected. Involving the students in certain administrative activities helps in keeping the program relevant to their needs and in stimulating their desire and interest to learn.

A student advisory committee, composed of representatives of the students enrolled in cooperative vocational education, can be helpful in giving advice on the type of policies and procedures which will be acceptable to their fellow-students. Although this group does not make administrative decisions, it can provide information about student problems and expectations which serve as guides to decision-makers. Experiences of this kind also help students develop acceptable ways of influencing social and work groups in later life. Cooperative vocational education students, many of whom have been outside the mainstream of school activities, can be inspired to become leaders if given the opportunity to participate in self-government.

In addition to the advisory function, students may participate in public relations activities, program evaluation, and curriculum planning. They can speak at service clubs, trade associations, before student groups and community organizations. Their evaluations of the program are more important than those of any other group. With regard to curriculum planning, the more responsibility students are given for self-directed learning and planning what is to be learned the greater will be their commitment to it.

DEVELOPING GOOD PUBLIC RELATIONS

Good public relations in cooperative vocational education is more than acquiring the goodwill of the public toward the program. The purposes, objectives, policies, procedures, and other information about cooperative vocational education should be communicated to a variety of specific audiences through various media. Even though cooperative education is not a new idea, the basic tenets often are not understood by individuals who are involved in it some way, or by those who would like to participate. A program of planned publicity and public information is essential to establishing and maintaining a good cooperative vocational education program. In order to be effective the publicity and information must take into account the concerns of the audiences to be reached and the media and methods which will convey the message to them.

Public Relations

1. The purposes, benefits, activities, and other information about cooperative vocational education must be communicated to the various individuals and groups who have a part in the program.
2. The interests and concerns of the specific audiences to be reached should determine the information to be communicated and the method to be employed in reaching them.
3. Student outcomes will shape the attitudes of all groups toward cooperative vocational education. Publicity should draw attention to the activities and achievements of students who received the instruction and training.
4. A good image of cooperative vocational education is achieved through teamwork. The program should be publicized as a joint effort and the coordinator should enlist the assistance of the advisory committee, faculty members, employers, students and others in publicizing the program and gaining total community support.

Reaching Specific Audiences

Students. The students who can benefit from cooperative vocational education are frequently unaware that this opportunity is available to them. Often, they know that there is a program but do not understand its purpose or perceive how it is related to their immediate interests and personal development. All students in the school should have the opportunity to learn about the program and what it has to offer them. The publicity that is directed toward students should appeal to their interests and goals. Peer-group opinion is a critical factor in the way the program is perceived by students. The chance to enter a well-chosen career field, to learn an occupation and to assume an adult role should be emphasized rather than providing an opportunity to earn money or to escape the school environment. Regularly spaced publicity in the school and local papers, student presentations at auditorium and classroom meetings, vocational youth organization activities, and informative brochures and displays are effective in reaching students. Frequently students say they learned about cooperative vocational education from a friend who was enrolled in the program. Satisfied and successful cooperative education students are the one best advertisement the program can have.

Parents. Many parents have considerable influence on the students' choices of courses and educational plans. They, too, are frequently uninformed of the opportunities in cooperative vocational education, or they may have been misinformed about its purposes and values. Their most common misconception is that students who enroll in cooperative vocational education cannot meet college entrance requirements. Parents not only want their children to have a good education, but to be part of the upper social strata in the school. In order to have the endorsement of parents, they must conceive the program as educationally sound and socially acceptable. Parents are reached through parent-teacher meetings, direct mail, spaced publicity in local papers, business and industry-sponsored meetings and publicity, and personal contacts with the coordinator in the community.

Faculty. Reaching the entire faculty is especially important because faculty members have a great deal of influence on student attitudes and interest in cooperative vocational education. Teachers evaluate cooperative vocational education in terms of its educational values. They are concerned with student outcomes – behavioral changes, educational growth, and emotional maturity. Their perception of the program is acquired through their observations of students who are enrolled and their associations with the coordinator. Therefore the coordinator must keep them informed of student progress, learning outcomes, and the results of follow-up studies showing how students benefited from their training. Other faculty members also enjoy knowing that their contributions to the development of students have had a bearing on their occupational adjustment and advancement; therefore, they should be recognized whenever possible. Communication with faculty members is accomplished through formal meetings and printed materials that acquaint them with the program and through day-to-day informal contacts with the coordinators and students enrolled in the program.

Administration. The administration, like the faculty, is interested in student outcomes – how students benefit from cooperative vocational education. They want to be kept informed of such matters as student achievements, placements, employer evaluations, and program activities. The coordinator keeps administrators informed by submitting statistical and written narrative reports periodically, and by inviting administrators to observe students at their training stations, in the classrooms, and at student youth organization functions. It is also essential that the administration learn from the coordinator what problems the program faces and what assistance the coordinator needs to expand and improve the program.

Employees. Workers in the community become involved in cooperative vocational education through their contacts with the students in the training stations. It is essential that they understand and support the training effort. Organized labor groups, in particular, will be concerned about how cooperative vocational education affects their members. Coordinators can establish good relations with employees and their labor organizations by enlisting their cooperation in the early planning stages and by giving recognition for their contributions to the program. When they conceive cooperative vocational education as benefiting workers in their occupational fields their support is forthcoming.

Employers. The employers of the community must be well informed about cooperative vocational education in order to understand their responsibilities in it. In the past some well-meaning employers have been willing to employ students but have never understood the training and educational aspects of the program. Employers are always interested in finding good potential employees. The program publicity directed toward them should emphasize the benefits of working with the school to develop good workers. The personal contacts made by the coordinator are the most effective means of communicating with employers; however, they are also reached through printed materials, service club and trade association meetings, program activities such as the employer-employee banquets, and through newspaper publicity. Their participation in program planning, advisory committees, evaluation, and public relations activities helps to keep them informed and involved in the program.

Community Groups. In most communities there are numerous agencies, organizations, and civic groups which are concerned with community development and the educational opportunities available in their schools. They are often influential in establishing new curricula or in getting total community support for programs. It is very important that these groups are kept informed of cooperative vocational education and that they have a part in helping to develop a program suited to needs of individuals in the community. Members of professional organizations, welfare agencies and societies, service clubs, and other community groups welcome opportunities to have the coordinator and students speak about cooperative vocational education at one of their meetings. Coordinators can also develop good relations with community groups by judiciously participating in their organizations and their community improvement projects.

Media and Methods of Communication

Developing a Program Image through the Students. The real test of the value of cooperative vocational education is in student outcomes. The program image is largely a reflection of what the program achieves in the personal development of the individuals who receive the training and instruction. Their job and school performance, their attitudes, and even their appearance communicate to others what the program can accomplish.

Employers judge the merits of the program by the success they have in developing satisfactory workers. Students talk about their experience in terms of satisfaction with their training and occupational status. The faculty and the school administration evaluate the program from their observations of student achievements and behavioral changes. Good or bad, student outcomes will shape the attitudes of all groups toward cooperative vocational education.

The coordinator and the school capitalize on this intense interest in the students by giving visibility to their activities and achievements. The success stories of students are the kind of publicity that parents, students, employers, educators, and the community in general want to hear. Students' appearances before various goups in the community are usually much more effective than anything the coordinator can report. A good product – successful, satisfied students – is convincing evidence that cooperative vocational education is a worthwhile venture.

Developing an Image through Teamwork. A good image of cooperative vocational education is achieved through the combined efforts of many individuals and groups. Satisfied employers, co-workers, faculty members, students and others who are convinced of the program's merits are much more effective in developing a program image than the coordinator's working alone in publicizing the program. The advisory committee can be helpful in reaching employers and in communicating the businessman's point-of-view about the program. Workers' interest in the program is stimulated by employer and labor organization communications with employees. Other teachers in the school create student interest by calling attention to the opportunities for occupational training. Parents and students are often reached through community groups which support the program.

Printed materials and letters bearing the endorsements of employers and other groups, in addition to those of school officials, emphasize the cooperative feature of the program. Recognition of the contributions made by all groups to the vocational development of students is one of the most important means of maintaining the kind of teamwork that gives the program a good image.

Use of Communication Media. A planned schedule of public relations activities is more effective than impromptu attempts to publicize the program. Publicity should be a continuous process using a variety of media such as the following:

1. Local and school newspaper articles on student activities, program information, and success stories of students
2. Flyers, brochures, and letters directed to parents, students, and employers
3. Student presentations before student groups, service clubs, parent and faculty meetings, and employer and employee groups
4. Coordinator presentations before similar groups
5. Career clinics for students conducted by cooperative vocational education students and participating employers
6. Employer visits to the school and faculty field trips to business and industry locations
7. Displays and exhibits of students' work and activities, in the school and in the community, and at fairs and conventions
8. Coordinator's personal contacts with individuals who have interests and concerns related to the program
9. Radio and television appearances by cooperative vocational education students, employers, and coordinator
10. Symposiums, seminars, and short training sessions for people in business and industry, conducted by the coordinator.

SUMMARY

The success of cooperative vocational education depends on the support and commitment of many different individuals and groups. The coordinator gets the support of administration, guidance personnel, faculty, students, parents, employers, employees, and other groups in the community by establishing policies and procedures which reflect the expectations of concerned individuals and by communicating program activities and outcomes. Planned, spaced publicity emphasizing student outcomes and the educational values of cooperative vocational education is essential to maintaining a successful program.

Chapter VI

STAFFING COOPERATIVE VOCATIONAL EDUCATION PROGRAMS

The single most important factor in providing good cooperative vocational education is the staff which operates the program. The administrators who are responsible for staffing of positions should recognize the diversified and complex nature of cooperative vocational education positions and be able to evaluate applicants in terms of job requirements.

DETERMINING STAFF ADEQUACY

Staffing

1. The adequacy of a cooperative vocational education staff in a specific school depends on the program purposes of that school; the characteristics of the students, occupations taught, and participating firms; and the availability of supporting staff.
2. A vocational education unit in a comprehensive school, at either secondary or post-secondary levels, will usually have a teacher-coordinator for each occupational field to be taught.
3. Each teacher-coordinator should be responsible for supervision of on-the-job training, related classroom instruction, and advising the vocational youth organization for up to thirty students. He may also teach one or two sections of pre-employment classes.
4. Where there are several cooperative vocational education programs in a variety of occupational fields, it is advisable to employ a supervisor to maintain consistent policies and coordinate program services and activities.
5. In smaller schools it is possible to have one teacher-coordinator serve several occupational fields if provisions are made for adequate related vocational instruction.
6. Small school districts may combine resources and employ one teacher-coordinator to serve several schools.
7. The work-load of a teacher-coordinator should allow at least one-half hour per student per week for coordination time, adequate time for individual student contact, and time for planning of related instruction.

The usual patterns and formulas for determining the adequacy of staff for general education programs in the school are not likely to apply to cooperative vocational education programs. In fact, the work loads and the staffing patterns for cooperative vocational education positions will vary among schools depending on the following factors:

1. Number and characteristics of students to be served
2. Number and diversity of occupations to be taught
3. Number and characteristics of participating firms
4. Size and location of the school district and the employment community

5. Supporting staff within the school (e.g. guidance personnel, related vocational subjects, teachers and special education staff)

Staffing Patterns

Vocational Education Department. Many large schools have a department of vocational education with a director who supervises the total vocational education program. Within that framework the usual pattern is to have teacher-coordinators for each of the occupational fields. Each coordinator may be responsible for the related classroom instruction, the youth organization, and supervision of on-the-job training for up to thirty students in his field. He may also teach related pre-employment classes for the occupational field in which he coordinates cooperative education. Although it is generally recommended that the same individual teach the related class and coordinate the on-the-job training, it is possible to have coordinators whose primary responsibility is placement and follow-up if there are other vocationally qualified teachers to provide related vocational instruction.

Comprehensive Cooperative Vocational Education Program. In some school systems, where there are a large number of individual classes of cooperative vocational education students and a variety of programs, it is advisable to have a supervisor of cooperative vocational education. The supervision and coordination of a comprehensive program is necessary to facilitate consistent policies and practices among vocational fields and to maintain correspondence between program development and training needs.

Small School Staffing. In smaller schools one or two teacher-coordinators for each occupational field may be adequate. For a very small school it may be possible for one teacher-coordinator to serve students in several occupational fields; however, the teacher-coordinator should then be qualified in these several occupational fields or there should be vocationally qualified teachers in the school to provide occupationally related instruction. In rural communities where the number of students in any one occupational field is very limited, it may be advisable to employ one teacher-coordinator to serve two or more schools. The advantages of occupationally similar grouping, which have been mentioned in other parts of this guide book, should be carefully considered in determining a staffing pattern for a school.

Work Load Determination

Teacher-Coordinator. The responsibilities of a cooperative vocational education teacher-coordinator cannot be equated with those of regular classroom teachers. The coordination of on-the-job training with classroom instruction requires a minimum of one-half hour per student per week. If a teacher-coordinator has twenty-five cooperative education students, which is an average size class, his weekly work load might be similar to the following:

2-3 hours of related classes per day	10-15 hours
1-2 hours of preparation per day and individual student contacts in school	5-10 hours
3 hours of coordination per day (employer or training station contacts)	15 hours
Total	30-40 hours per week

The example given does not take into account the variances in student needs or community characteristics which may require that the coordinator spend more time in individual student or employing firm contacts. One-half hour per student per week for coordination is recommended with the assumption that each training station should be visited at least once every two weeks and the objective of the call could be achieved in one-half hour. Some coordination calls may take 15 minutes; others may take several hours. When the employment community is geographically large, or widely dispersed, or not in close proximity to the school, more time is required to get to and from the firms which employ students.

Coordinator Work Load. For positions in which the coordinator does not teach the related classes, the amount of time for coordination would be nearly the same – one-half hour per student per week. The coordinator who does not have classroom contact with students will likely have to spend more time in individual student contact and working with related vocational classroom teachers to correlate classroom instruction with on-the-job training. A typical weekly work load for a coordinator who does not teach the related class may be as follows:

For fifty students	
5 hours of coordination per day	25 hours
1-2 hours of individual student and related class teacher contact	5-10 hours
Total	30-35 hours per week

An individual school administration is sometimes tempted to relax standards in order to serve large numbers of students at the expense of not providing adequate occupational preparation or even losing the services of a coordinator who wants to do a good job. The determination of work load should be carefully considered in relation to the program purposes. In order to prepare individuals effectively for occupational adjustment and advancement, those who direct the learning must have adequate time to coordinate the on-the-job training and related vocational instruction.

COMPENSATING STAFF MEMBERS

Compensation

1. Teacher-coordinators or other cooperative vocational education staff members who have years of full-time occupational experience should receive credit on the salary schedule similar to credit given for years of teaching experience.
2. Budget allowances for compensating the staff must provide additional compensation for extended contract time, usually a 10 to 11-month contract, and in some cases 12 months.

A school administration should give consideration to the placement of cooperative vocational education staff positions on the salary schedule. In order to attract occupationally competent personnel from business and industry it is often necessary to allow salary schedule credit for occupational experience, just as experienced teachers are compensated in accordance with their years of teaching experience. The competence of the coordinator in the occupational field for which training is given should be recognized as essential to providing a quality educational program.

Another cost factor to be considered is compensation of the staff for contracts extended beyond the usual 9-month school year. It may be feasible to offer some sections of the cooperative vocational education program throughout the year. In most schools it is necessary for the coordinator to be on a 10 to 11-month contract to achieve the desired placements and follow-up of students. Staff member vacations are planned for slack employment periods or at times when students in the program do not require intensive supervision and related instruction. Compensation should reflect the additional months or weeks beyond the regular school year.

SOURCES OF STAFF MEMBERS

Sources of Staff

1. Staff members should be initiated and employed in the early stages of initiating a program.
2. The principal sources of cooperative vocational education staff are:
   a. Graduates of teacher-training institutions which prepare vocational education teacher-coordinators
   b. Teachers within the school who can qualify with additional course work or occupational experience
   c. Business and industry personnel who are willing to complete professional courses to qualify themselves.

In order to begin a cooperative vocational education program, a school must have well qualified personnel to operate the program. Unlike some academic and general education fields for which there may be many qualified applicants, there is a shortage of properly trained personnel and usually an inadequate complement of persons trained to conduct cooperative programs. It is highly recommended that a school have a staff identified and employed before students are enrolled in the program.

In addition to the applicants who are drawn from graduating classes of colleges and universities, sometimes vocational teachers already employed within the school system can qualify after a small amount of additional training. A teacher already in the school system usually has the advantage of knowing the needs of the students the program is intended to serve. Frequently he is active in the employment community in which students will work.

Another source of cooperative vocational education staff members not to be overlooked is the personnel employed in local firms. Usually, there are several individuals employed in business and industry who are potentially excellent prospects for the teacher-coordinator position because they know their occupational field and how to go about preparing students for job entry and advancement. In addition they are effective in maintaining the desired relations with participating employers. Personnel drawn from business and industry usually must take special courses and training to qualify for teaching; however, in some situations their services may be so essential to the success of a cooperative vocational education program that a school might wish to consider providing the means whereby the additional training can be obtained.

DETERMINING COMPETENCIES NEEDED BY STAFF MEMBERS

The competencies needed by staff members are derived from an analysis of the tasks they perform in their positions. A systematic approach to filling a position is to adequately describe the job and then determine what competencies are needed. Although each position will vary with the program differences mentioned previously, there are some similarities in several job descriptions of cooperative vocational education positions which are identified here.

Needed Competencies

1. Competencies needed by cooperative vocational education staff members vary with the occupational field and the duties and tasks each staff member must perform.
2. Generally the teacher-coordinator must be competent in (a) the guidance and selection of students; (b) enlisting and supervising the participation of employers; (c) teaching related instruction; (d) handling personal and educational problems of students; (e) directing vocational youth organization activities; (f) administering the program; (g) maintaining good public relations; and (h) knowing Federal and State laws relating to vocational education, employment of minors, etc.
3. Related subjects teachers, who do not coordinate on-the-job training, must be competent in the occupational field and in providing instruction related to the occupations.
4. A coordinator who does not teach the related instruction must be capable of assisting the related subjects teacher in planning relevant instruction in addition to the competencies needed to supervise on-the-job training.

Job Description of a Teacher-Coordinator

A teacher-coordinator for a cooperative vocational education program is usually given the total responsibility for directing the on-the-job training and related instruction of a group of 20 to 30 students who are preparing for occupations in a single career field, such as office occupations, agriculture or health occupations. The duties and tasks performed by the teacher-coordinator may be categorized as follows:

1. Guidance and selection of students
    - Describing the program to students
    - Working with guidance personnel
    - Providing occupational information
    - Counseling students about entering the program
    - Gathering information on students
    - Programming and scheduling
    - Helping enrollees with career planning
2. Placing students in training jobs
    - Enlisting participation of cooperating employers
    - Selecting suitable training stations for each student
    - Orienting employers, training supervisors and co-workers
    - Preparing students for job interviews
    - Placing students on the job
3. Assisting students in adjusting to their work environment
    - Helping students on their jobs
    - Dealing with job problems
    - Planning personal development with training supervisors and students
    - Evaluating job progress
4. Improving training done on the job
    - Establishing responsibilities on the job
    - Developing training plans
    - Consulting and assisting training supervisors
    - Maintaining training emphasis
5. Correlating classroom instruction with on-the-job training
    - Determining needed instruction
    - Assembling instructional materials
    - Preparing for instruction
    - Teaching classes
    - Directing individual projects and study
    - Obtaining assistance from other teachers
    - Advising training supervisors concerning applications of classroom instruction to be made on the job
    - Evaluating learning outcomes
6. Assisting students in making personal adjustments
    - Aiding students in correcting poor personal habits
    - Counseling students with personal and socio-economic problems
    - Assisting students with educational problems
    - Resolving behavioral problems

7. Directing vocational youth organization
    - Advising youth group
    - Guiding students in organization of activities
    - Participating in group activities

8. Providing services to graduates and adults
    - Providing guidance and placement services for graduates
    - Participating in the planning and operation of adult education programs

9. Administration activities
    - Planning program objectives
    - Research and planning – surveys
    - Organizing and working with advisory committee
    - Planning curriculums
    - Communicating school policy
    - Preparing reports
    - Budgeting and purchasing
    - Participating in professional meetings
    - Consulting with manpower agencies such as employment services and CAMPS

10. Maintaining good public relations
    - Planning the publicity program
    - Preparing printed publicity
    - Constructing displays and exhibits
    - Contacting news media
    - Maintaining communication with faculty, parents, community, employers, school administrators and student body

The above job description is some indication of the competencies needed by a teacher-coordinator. In addition to being competent in teaching the occupational field for which he is preparing students, he must be able to coordinate and perform the many tasks outlined above and to enlist the cooperation of others in carrying out the program objectives.

Job Description of Related Subjects Teachers

In some cases other teachers may engage in related vocational instruction such as agriculture, automotive shop, clothing construction, office procedures and salesmanship to students who are in cooperative vocational education. Their job description is similar to Item #5 in the teacher-coordinator's job description with primary emphasis on planning instruction, assembling instructional materials, teaching classes, directing individual projects and study, and evaluating learning outcomes. They work closely with the coordinator in determining the learning needs of students.

Related subjects teachers also must be competent in the occupational field for which they are preparing students. Teaching the related instruction for cooperative vocational education, students may be only a part of their total job assignment. They may teach other classes in their subject matter field to students not enrolled for cooperative vocational education. Special preparation may be needed by teachers dealing with the disadvantaged.

Job Description of a Full-Time Coordinator

In other parts of this guide reference has been made to the possibility of employing a full-time coordinator who does not teach the related vocational instruction. Referring again to the job description of a teacher-coordinator, the full-time coordinator's position includes all of the duties described except teaching related classes. A full-time coordinator needs competencies in determining what the related instructional program should be for individual students.

EVALUATING QUALIFICATIONS OF APPLICANTS

The job description for a teacher-coordinator position is a guide in determining minimum standards for evaluating the qualifications of applicants. State Boards for Vocational Education usually establish minimum standards for certification of cooperative vocational education staff members; however, a local school may need more explicit criteria for evaluating the qualifications of several applicants, all of whom are certifiable.

Necessary Qualifications

1. State Boards of Vocational Education set minimum requirements for certification of cooperative vocational education staff members, but a school should establish additional standards for selecting personnel.
2. Occupational experience of applicants should be evaluated in terms of quantity (years or hours), quality, variety, and recency that is relevant for teaching the competencies needed by students in the occupational field to be taught. Minimum requirements usually range from 1 to 3 years.
3. The technical course requirements, courses in content areas, should be related to the occupational field. Minimum requirements range from 12 to 18 semester hours of technical course work.
4. General professional course requirements would be similar to those of teachers in general.
5. Vocational education course work is essential, not only to satisfy certification requirements, but to prepare the teacher-coordinator for organizing and administering the program, for coordination duties, and for directing the school, job and youth organization learning activities. Nine to twelve semester hour credits or three to five courses are usually recommended.
6. Personal qualities, such as appearance, attractive personality, self-motivation, and empathy for others are especially important for cooperative vocational education personnel because of the relationships they must maintain with employers, students, and others in supervising successful programs.

Occupational Experience

State certification standards specify a minimum number of hours of experience in the occupational field required to meet certification. The minimum number of hours range from 2000 to 6000, or one to three years. Most states have provisions for substituting supervised or directed occupational experience for the required minimum hours. Usually proration is approximately one hour of directed experience for each required four hours of self-obtained occupational experience that is not directed or supervised by a college or State educational agency. In addition to the number of hours or years of employment in an occupational field, consideration should be given to the quality, variety, and recency of the experience. A directed experience of shorter duration, which provides opportunities to examine occupations in terms of training needs and job problems, may be more valuable than many years of occupational experience obtained prior to having a vocational teaching objective. The occupational experience requirements are likely to vary with different programs and occupational groups to be served.

Quality of Experience. Occupational experience should be evaluated in terms of its relationship to the occupations to be taught. A series of part-time jobs in entry-level positions might satisfy the hour requirements but not provide the teacher with needed occupational competence to train students for adjustment and advancement in the field. Supervisory experience is particularly valuable because, presumably, the individual has demonstrated ability to supervise the work of others and has some insight into positions beyond the entry level.

Variety of Experiences. Usually students preparing for an occupational field should receive training which applies to a broad field as well as the skills needed to adjust to their immediate training jobs. Thus it is important that the teacher's occupational experience contain enough variety to help him conceive the needed vocational capabilities for a variety of positions within the field and for clusters of competencies which are common among different occupations and jobs. Variety may have been achieved through a person's having been employed in several different types of positions or having held one position with a variety of job duties or tasks performed.

Recency of Experience. The rapid changes in occupations and in business and industrial practice make it necessary to evaluate occupational experience in terms of recency. There is a growing trend to request that vocational teachers obtain additional occupational experience periodically to keep abreast of change and to maintain instruction which is relevant to the occupations students will enter.

Technical Course Work in Content Areas

State certification standards usually specify a minimum number of courses or college credits in the technical content area for the occupational field. These minimums will vary among vocational fields and the various educational levels at which the cooperative vocational education is offered. Usually the technical course requirements will be approximately 12 to 18 semester hours; again the quality and the relevancy of the courses to the occupational field to be taught is an important consideration. Marketing, advertising, salesmanship, and display, are necessary specific technical courses for secondary school distributive education teachers. Biology, chemistry, and community health are important in the preparation of health occupations teachers. In addition to technical courses directly related to an occupational field, such courses as economics, industrial relations, occupational sociology and vocational psychology are valuable in preparing cooperative vocational education personnel for all occupational fields. Post-secondary teacher-coordinators are usually expected to have more depth in technical course work than secondary school personnel.

Professional Course Work

Teacher-coordinators in secondary school cooperative vocational education programs usually are required to meet similar certification standards for all secondary school teachers. These commonly include courses in educational psychology, teaching methods, tests and measurements, and secondary school student teaching. Post-secondary teacher-coordinators are not always required to have as many professional course requirements as secondary school personnel.

Vocational Education Course Work

Cooperative vocational education teacher-coordinators should have vocational education course work in the following areas:

1. Organization and Administration of Cooperative Vocational Education
2. Coordination Techniques
3. Philosophy of Vocational Education
4. Teaching Methods in Cooperative Vocational Education (specific to the occupational field to be taught)
5. Occupational Analysis and Course Construction
6. Vocational Guidance
7. Student Teaching
8. Adult, Post-Secondary other Specialized Course Methods (as appropriate for a position)

Personal Characteristics

The qualified cooperative vocational education teacher-coordinator should possess the physical stamina, emotional stability and personal traits which are necessary in order to organize the resources of the school and the employment community in preparing students for occupations. The following traits and habits of the teacher-coordinator are considered essential to effective program operation:

1. Pleasing neat appearance

2. Warm, outgoing personality
3. Strong commitment to helping young people
4. Systematic and orderly habits in organizing work
5. Self-confidence and positive attitude in dealing with problems
6. Good judgment
7. Empathy with students, employers and others
8. Self-motivation and an untiring worker

The coordinator must be the kind of person who relates well with students, employers, parents, other faculty members, administrators, and interested people in the community in order to enlist their cooperation and help. The time and efforts of individuals who have the necessary qualifications are also in great demand by business, industry and other institutions and government agencies. Salaries must be adequate to attract to cooperative vocational education positions individuals with the capabilities which the positions require. The teacher-coordinator is the key factor in the success of a cooperative vocational education program.

PROVIDING FOR TEAM TEACHING

Team teaching can be utilized in cooperative vocational education to provide general related instruction which applies to all occupational fields and to develop the needed competencies which are drawn from the technical content of several occupational fields, such as vocational capabilities needed by students in agri-business occupations. As programs are expanded to provide training in many new occupations, team teaching can be used to provide interrelated instruction.

Team Teaching

1. The common vocational capabilities needed by students in all occupational fields and the varied capabilities needed by students within each occupational field suggest several possible uses of team teaching.
2. General related instruction which is common to all occupations can be provided in groups where the students' occupations are in several vocational fields.
3. Teacher-coordinators from the several occupational fields can work as a team, teaching the content in which each specializes to students whose occupational goals require capabilities in these special occupational content areas, e.g. marketing, home economics, business, etc.

Team Teaching in General Related Instruction

There are some advantages in grouping cooperative vocational education students from several occupational fields for instruction which is common for all of them. One advantage is the exchange of information among students preparing for different occupations. Another advantage may be in effective use of the staff. The major disadvantages of team teaching are in the impersonal student-teacher relations, which sometimes happen in team-teaching; and the inability of team teachers to understand each student's background, needs, and personal problems which have a bearing on learning. The teacher-coordinator who is particularly effective in teaching grooming, or how to interview for a job, can help students in all the occupational fields. Team teaching can be effectively used in general related instructional areas such as the following:

1. Choosing and planning a career
2. Applying for a job
3. Getting along with employers and co-workers
4. Developing a work personality
5. Grooming and dress

Team Teaching Interrelated Instruction

The teacher-coordinator, who should be competent in the basic technical skills of the occupational field in which he specializes, cannot always provide the depth of knowledge needed in a highly specific technology drawn from another content area. For example: students preparing for occupations in agri-distribution (e.g. farm supply sales) must have the technology of agriculture and also the technical skills in marketing and salesmanship. In this example the needed instruction can be provided by having the agri-business coordinator and the distributive education coordinator work as a team to develop the desired capabilities and competencies. Most occupations draw on several content fields, and by utilizing team teaching the students can receive specialized technical instruction from the teacher best prepared in the needed vocational area.

Teacher-Exchange Systems. One way of organizing instruction and facilitating team teaching is to have the vocational teachers exchange classes of students. The home economics teacher-coordinator may teach a unit on color and fabrics to students preparing for fashion merchandising occupations while the distributive education teacher-coordinator teaches a unit on salesmanship to students preparing for home economics related occupations, such as tailoring and clothing alterations. There are numerous possibilities for exchange which will contribute to better instruction for occupations requiring a variety of specialized competencies.

Teacher-Resource Systems. A teacher-coordinator who is responsible for directing the related instruction of thirty students can draw on other technical competency areas by having teachers in these areas work with individual students. A student in the trades areas, such as automotive repair, may go to the office occupations coordinator for special help in record-keeping and accounting as applied to operating a repair business. Schools which operate under modular flexible scheduling can easily provide more opportunities for interrelated instructional programs.

SUMMARY

No vocational education program requires as great a sensitivity to individual and community needs as cooperative vocational education. This requirement decrees carefully selected personnel with special talents and attitudes, who perform a surprising number of guidance and public relations functions in addition to their regular teaching assignments. Hence the first requisite of an effective and efficient program is good personnel with an administrative environment which allows sufficient freedom for them to function properly.

When planning and manning cooperative vocational education positions, decision-makers should keep in mind the important role of the coordinator in building and maintaining a favorable community image of the school and the program. Also to be kept in mind is the image of the program among the students enrolled and those of the student body as a whole. The program image held by both of these publics depends almost entirely on the program personnel, particularly on the teacher-coordinator. Fortunately or unfortunately, depending on one's viewpoint, the activities and behavior of cooperative vocational education personnel are highly visible. Both employers and students are highly sensitive to the competency and judgments of teacher-coordinators because of the unique nature of the interpersonal relations that exist. Unlike many teachers of other classes the cooperative vocational education teacher is by no means the ultimate authority in his occupational field and his teachings and actions are continuously being compared and contrasted with other parties in the cooperative arrangement.

In conclusion, the time and effort expended in planning and manning cooperative vocational education positions is, without doubt, the most critical of all program activities. Also, in light of the dynamic nature of the program, it is highly essential that every advantage be taken of opportunities to update and upgrade personnel through State department directed coordinators' conferences, in-service training institutes, workshops and other means.

Chapter VII

MAINTAINING AND IMPROVING COOPERATIVE VOCATIONAL EDUCATION

The challenge of extending cooperative vocational education to more individuals and including preparation for additional types of occupations requires strong leadership in program development and supervision. In order to achieve the outcomes Congress intended from the Vocational Education Amendments of 1968, a major thrust must be made in the development of competent program personnel, specifically designed instructional materials, program evaluation based on student outcomes, and a broad program of research in cooperative vocational education. Without adequate provision for ancillary services at the local and State levels, cooperative vocational education is not likely to be expanded and improved.

PROVIDING FOR SUPERVISION

The impetus for improvement and growth of cooperative vocational education comes from effective supervision at the local and State levels. Supervision provides the resources, consultation, leadership, and coordination of efforts necessary to extend and improve programs within the area served by the supervisory staff. Supervision is vital to long-range planning. It is imperative to the type of program development expected for cooperative vocational education.

Supervision

1. Good supervision at the local and State levels is essential to maintain quality in cooperative vocational education and to achieve the appropriate extension of programs.
2. State plans and local applications must contain provisions for adequate supervision as a part of a total program. Provisions for supervision of cooperative vocational education programs funded under Part G must be explained in the application.
3. Supervisory personnel must be specifically competent in identifying, enlisting and developing personnel to implement cooperative vocational education and to coordinate the program's many services and activities.
4. State and local supervisory positions may be designated by occupational fields; however, consideration should be given to having a supervisor of cooperative vocational education who coordinates the development of programs across occupational fields.
5. The major functions of supervisory staff include: (1) planning and budgeting, (2) communicating goals and plans, (3) developing personnel, (4) evaluating programs, (5) reporting results and activities, (6) coordinating activities and groups, (7) assisting teacher-coordinators.

Identifying Supervisory Personnel

The key to effective supervision and leadership is the appointment of qualified supervisory personnel. To be effective, they must be experts in cooperative vocational education and be able to work harmoniously with those whom they supervise and with the many individuals and groups who are involved in some way in the program. They must be leaders in vocational education who are well-informed on occupations, manpower needs, characteristics of student groups and communities, procedures for establishing new programs, and systems for planning and budgeting. It is essential that supervisors in cooperative vocational education be adept in identifying, enlisting and developing personnel who will be responsible for implementing programs.

Tasks of State Supervisory Staff. A State supervisory staff exists to carry out the provisions of the State Plan and to assist local educational agencies in developing and maintaining programs which serve local needs and which meet or excel standards set forth in the State Plan. The supervision of cooperative vocational education may be a function of supervisors in each of the vocational areas, such as supervisors of office education and home economics education; or, as in some states, it may be the responsibility of a special cooperative vocational education staff. Under either arrangement for supervision the following tasks or functions must be performed:

1. Defining what is to be accomplished;
   philosophy, objectives, goals, duties, standards, authority, and procedure
2. Forecasting what is ahead;
   manpower needs, characteristics of student populations, educational trends, occupational changes, training needs.
3. Preparing a plan of action:
   budget, personnel, programs, facilities, training, curricula, materials
4. Communicating goals and plans;
   advisory groups, state officials, local administrators, business and industry, teacher training institutions, other government agencies, local staff, general public
5. Developing personnel;
   recruiting, conducting or providing training, consulting, guiding, assisting
6. Evaluating progress toward meeting objectives;
   student outcomes, manpower objectives, benefits to community
7. Reporting program information
   costs and benefits, enrollments, activities, outcomes, growth and development of programs and staff, needed changes
8. Coordinating participating groups;
   state department staff, advisory committees, labor groups, management groups, employment agencies, social service agencies, professional organizations

9. Assisting local schools;
    local plans and applications, facilities, personnel, program development, curriculum, evaluation

Tasks of Local Supervisory Staff. The local supervisory tasks are similar to many of those described for the State level positions; however, they will vary with the size of the community and comprehensiveness of the program. The responsibility for local supervision of cooperative vocational education may be delegated to persons in several positions: (1) local school administrator, (2) local director of vocational education, (3) local supervisors of vocational program areas, or (4) local supervisor of cooperative vocational education. There is also the possibility of geographical area supervisors who serve a number of school districts. The major advantage of employing a special supervisor of cooperative vocational education is that efforts to develop a comprehensive program can be coordinated, and development focuses on programs that cut across traditional vocational areas. The tasks of local supervisors include the following:

1. Advise administration;
    new program development, selection of personnel, recommendations for facilities, budget priorities, statistical reports, research
2. Prepare comprehensive local plan;
    immediate and long-range plans, budget, applications
3. Establish policies and procedures;
    administration and operation
4. Maintain cooperative relationships;
    advisory committees, labor groups, trade and professional organizations, employment service, other government agencies, post-secondary institutions
5. Work with teacher-coordinators;
    curriculum development, organization of advisory committees, improvement of instruction, coordination of placements, communication of policies and procedures, research projects
6. Coordinate public relations;
    development of a program of planned publicity, maintenance of contacts with media, preparation of printed materials

Planning a Staff Improvement Program

A major function of State and local supervisors is the development and improvement of personnel in cooperative vocational education. Programs which prepare individuals for occupational entry, adjustment, and advancement must be responsive to changes in manpower needs and to changes in the technology of jobs. It is a never-ending task to keep vocational instruction up-to-date and to help teacher-coordinators keep abreast of rapid changes in the world of work. If this necessity is to be met, supervisors must plan staff improvement programs whereby personnel are kept well-informed on new processes, practices, materials and training aids for the occupations to be taught.

New staff members need to be oriented to the objectives and practices of a program by their supervisors. A good supervisor makes certain that new personnel are made to feel a part of an organized team. Even though collegiate pre-service training is expected to prepare staff members for their roles, the policies, practices, and purposes of programs in local communities and individual schools vary to the extent that new personnel need assistance in the early stages of their work. Hence supervisors should conduct workshops and conferences for this purpose.

Changes in legislation and new directions for program development must be communicated periodically to teacher-coordinators. The 1968 legislation was intended to extend cooperative vocational education to more individuals and include preparation for occupational fields which heretofore have been neglected. State and local supervisors need to exercise strong leadership in stimulating local school personnel to initiate new programs and to adjust to changing community and individual personal vocational education needs.

In addition to workshops and group conferences, supervisors should be available for assistance to individual staff members. New staff members should not be expected to begin their positions without being able to consult an expert when critical questions arise. Many problems are avoided and early successes achieved by having adequate supervision and consultant service for new personnel.

PROVIDING FOR TEACHER EDUCATION

When the supply of qualified personnel is adequate to meet the needs, there usually is little concern about the ways in which teacher education is provided. This situation has not existed in cooperative vocational education. In fact, program growth and development usually has been deterred because of lack of trained coordinators or teacher-coordinators. Before the goals of the 1968 legislation can be realized, many more individuals must be trained for teacher-coordinator positions. State plans must contain provisions for teacher education. In most states the major teacher training institutions are designated by the State board to provide pre-service teacher training to prospective cooperative vocational education personnel, and to contribute significantly to in-service teacher education. These institutions usually are reimbursed in part from State and Federal vocational education funds.

Pre-Service Teacher Education

The preparation of cooperative vocational education personnel should be a shared responsibility of the State Departments of Education, teacher training institutions, local schools, and employers who provide directed occupational experience for teachers in training. There are basically three groups of individuals who receive pre-service training: (1) young high school graduates with minimal occupational experience who are completing a four-year college degree, (2) experienced business and industry or public service workers who return to college to prepare for teaching, (3) experienced teachers in other subject matter fields who must be certified for vocational education and who may lack adequate occupational experience.

Teacher Education

1. Provisions are made in Part B and Part G of the 1968 Act for reimbursing teacher education in cooperative vocational education.
2. In order to extend and improve cooperative vocational education many additional teacher-coordinators must be trained.
3. Teacher education should be a shared responsibility of State departments, teacher training institutions, local schools, and employers.
4. State boards are responsible for developing certification standards. They recommend programs for teacher-coordinator preparation.
5. Teacher training institutions should be evaluated in terms of both the technical and professional program components. There should be a staff that is specially qualified for preparing cooperative vocational education personnel.
6. Local schools should be encouraged and assisted financially in providing quality student-teaching and internship experiences.
7. Business, industry, and public service agencies should be involved in preparing teacher-coordinators by providing opportunities for directed occupational experience.
8. In-service teacher education is essential in cooperative vocational education. It can be provided in (1) teacher training institutions through advanced courses and workshops, (2) State sponsored workshops and conferences, (3) individual consultation with supervisors, and (4) locally conducted workshops, conferences, and staff meetings.

State Department Participation. In accordance with the 1968 Act, the State boards must establish standards for certification and, in cooperation with teacher training institutions and local schools, determine what preparation is needed by the three groups identified above. Even though the teacher training institutions may be delegated the major responsiblity for doing the training, State departments are expected to maintain standards and provide funds to adequately finance teacher education programs.

Teacher Training Institutions. Public state colleges and universities are nearly always the institutions designated to conduct pre-service teacher education. They are so designated because public funds are used to finance programs and because they can usually provide both the technical and professional preparation needed. An institution must offer special training for cooperative vocational education and have a qualified staff who can develop the special competencies needed to coordinate school and job instruction. Without special reimbursement from State and/or Federal vocational education funds it is doubtful that insitutions of higher education would be able to provide adequate cooperative vocational teacher education. State department personnel and teacher education staff members must maintain good cooperative working relationships to keep teacher education programs relevant to the needs of the personnel they serve.

Local School Participation. Student-teaching and internships are crucial experiences in the preparation of cooperative vocational education teacher-coordinators. Unfortunately, local schools are seldom recognized for their important contribution to this pre-service teacher education. Perhaps for this reason some local school personnel do not accept any responsibility for pre-service training.

Student-teaching should be carefully planned and supervised by master teacher-coordinators. It should include experiences in all phases of program operation and coordination. Consideration should be given to designating those schools which are best staffed to provide quality training. Schools should be encouraged to assume more responsibility for pre-service training by providing special reimbursement.

Employer Participation. One of the reasons for insufficient cooperative vocational education personnel is the necessity of finding individuals who have adequate occupational experience as well as the required educational preparation. There are many individuals who begin teaching with minimal occupational experience who later discover that their practical knowledge in the occupational field is inadequate. The most feasible solution to providing better occupational practical training is to enlist the help of business, industry and public service agencies in providing directed occupational experiences for teachers-in-training. Without this type of concerted effort to provide personnel with appropriate occupational skills and knowledges, relevant related instruction of high quality cannot be achieved. This is a very important consideration at this time when there is a great demand for expansion and improvement of programs.

In-Service Teacher Education

In-service teacher education can be provided (1) through advanced courses and workshops conducted by teacher training institutions; (2) through State department sponsored conferences, workshops, seminars, and individual consultations with staff members; (3) and through local school sponsored workshops and staff meetings. Usually the personnel are more highly motivated when additional training and education enhances their status on the salary scale. Each of the three approaches should be utilized to fulfill different needs for in-service training.

Advanced Courses. There should be graduate level programs in the teacher training institutions for in-service vocational teachers to update and improve both their technical and professional competencies. These courses or programs should be flexible and responsive to the needs of teachers seeking advanced work and up-dated training, without relaxing standards established for graduate level work. Summer school classes, intensive workshops, evening and Saturday classes, and extension courses given in local areas make it possible for in-service teachers to continue advanced work. If present cooperative vocational education personnel are to develop new programs for the disadvantaged and include training for additional occupations, there will have to be teacher education programs to prepare them for these new responsibilities.

State Sponsored In-Service Activities. Many kinds of in-service training needs can be met through 2 to 3-day workshops and conferences, for which the State departments may require attendance. In addition to communicating State plan policies and recommended procedures to be followed, there should be State and local conferences to acquaint teacher-coordinators with new information, instructional materials and new teaching ideas. There is much to be gained by providing opportunities for in-service personnel to exchange ideas and to explore common problems. Some of the purposes of in-service teacher education can also be achieved in one-day meetings held in convenient locations. State departments must provide the leadership and financial support to start such programs. Some of the responsibility for planning relevant in-service programs and conducting conferences can be delegated by State departments to selected teacher-coordinators in the field or to professional vocational associations.

There are individual in-service personnel with individual needs and problems which may be met best through individual assistance of a supervisor. This implies the need for supervisory staff and time to assist individual teacher-coordinators. The supervisor of cooperative vocational education may provide help in organizing advisory committees and sponsor development programs. These specific needs for in-service assistance should not be overlooked.

Local School In-Service Training. A local director of vocational education or a supervisor of cooperative vocational education is frequently the best person to conduct in-service training. He may be more aware of his staff needs and both his time and theirs can be more efficiently utilized if the in-service training takes place in local facilities. As programs are expanded and students are prepared for occupations which draw on the content of interrelated fields, it becomes increasingly important that members of a large staff learn to work together. There is also a great need for in-service training to orient counselors, administrators, and supporting faculty to their part in cooperative vocational education and in their contributions to pre-vocational preparation of students. Local in-service teacher education can be flexible and tailored to the needs of a particular school or community. Some schools have organized in-service programs in which the participants go out into the community for directed occupational experiences and employers are brought into the school for seminars and discussions to plan better programs of instruction for students.

State departments of vocational education should encourage locally sponsored in-service programs by providing the necessary financial aid and resource leaders. Teachers are motivated to participate better when in-service programs are designed to suit their needs and adapted to their schedules.

PROVIDING FOR INSTRUCTIONAL MATERIALS DEVELOPMENT

One of the more pressing needs in cooperative vocational education is appropriate instructional materials. The teacher-coordinator's job is complicated by the fact that much of his valuable time is spent in locating, and even writing, instructional materials which are tailored to the vocational capabilities and competencies required in the occupations for which individual students are training. As cooperative vocational education is extended to include additional occupational fields and new groups of students, there will be a dire need for new related instructional materials, particularly for individualized learning packages.

Instructional Materials

1. The 1968 Act provides for reimbursing the cost of developing instructional materials.
2. New materials, particularly individualized study packages, are needed to provide related instruction for additional occupations and for new groups of students.
3. Materials specialists, at the State level and in large local school systems, are needed in order to develop quality materials.
4. State sponsored and financed curriculum materials centers are needed to assist teacher-coordinators in locating, developing and learning to use quality instructional materials – course outlines, supplementary and reference materials, teaching aids, tapes, etc.

Sources of Funds for Curriculum Materials

The 1968 Vocational Education Amendments enable the States to use Federal funds for the development of curriculum materials. Consideration should be given to employing specialists at the State level to develop curriculum materials for cooperative vocational education. Large school systems with comprehensive programs may also achieve more efficient use of teacher-coordinator time by employing special staff members to locate and write materials. It is possible to improve the quality of various types of materials and to sharpen the timing of their availability when specially trained staff members have this work as their primary function. New techniques in programmed learning and audio-visual materials, which are very much needed for individualized instruction, require more time and frequently more capability than the individual teacher-coordinator can devote to preparing them.

In addition to using State vocational education funds to employ curriculum materials specialists, there is the possibility of contracting for projects with in-service teacher-coordinators or with individuals in business and industry who are particularly well qualified to develop the needed materials. The relevancy of the content and the acceptability of materials by teacher-coordinators are often enhanced by the participation of practitioners in writing them.

Part I (following Part H) of the 1968 Vocational Education Amendments authorized appropriations for the development of curriculum materials in vocational and technical education. Materials for cooperative vocational education may be financed through this source when appropriations are made. Colleges or universities, State boards, and other public or non-profit private agencies and institutions can apply for grants to prepare curriculum materials, to prepare current lists of curriculum materials available, to evaluate materials, and to train personnel in curriculum development. The grants are made by the Commissioner in the U.S. Office of Education after consultation with the appropriate State agencies and the National Council.

Acquiring Curriculum Materials for Vocational Education Centers

Curriculum materials centers are recommended as an efficient way of making instructional materials readily available to teacher-coordinators. These centers are housed in State department facilities or in centrally located schools and/or teacher training institutions to which cooperative vocational education personnel can come or write for assistance. Large school systems with comprehensive programs should have their own resource centers to serve the needs of their staff. Materials for related subjects teachers and other vocational education staff members could be housed in the same units.

Vocational education funds can be used to staff a center and to acquire materials for use in vocational instruction. Materials may be acquired from other State curriculum materials centers, commercial publishers, business and industry sources, and from government agencies. An efficient storage and retrieval system should be incorporated, and there should be equipment for the reproduction of materials. Personnel who are expected to utilize this service must be kept informed of what is available and how they can acquire or borrow it.

In addition, a center can facilitate the development of materials by bringing in teacher-coordinators on short-term contracts to write materials. The center might also be staffed to provide assistance to teachers in using the materials effectively. Expenditures for such centers are justified when they contribute to the improvement of vocational instruction and allow teacher-coordinators more time to work with students.

PROVIDING FOR COOPERATIVE VOCATIONAL EDUCATION EVALUATION

The 1968 Act requires that State Plans contain provisions for periodic and continuous evaluations of State and local programs, services, and activities. Evaluations should be of sufficient extent and frequency to enable State boards to carry out their functions and fulfill the purposes of the Act. The State Advisory Councils are required to evaluate the total program annually in terms of meeting program objectives and to recommend such changes as may be warranted by their evaluations. In addition, State boards require local educational agencies to conduct their own periodic evaluations of the effectiveness of their programs. The costs of such evaluations are supported with funds from allotments provided under the Act.

Establishing Evaluative Criteria

Appropriate well-stated program objectives and carefully thought-out written policies and procedures facilitate the process of evaluation. Criteria for evaluation are specified in

State Plans; however, a local educational institution or agency is likely to need a more detailed type of evaluation in order to adjust programs, services and activities so that they will fulfill local program purposes.

Evaluation

1. State and usually local plans are required to contain provisions for periodic and continuous evaluations.
2. The costs of evaluations are reimburseable expenses.
3. Evaluative criteria are derived from program objectives; however, professional associations, research centers and accrediting organizations can provide guidelines for formulating criteria.
4. The staff of a program to be evaluated should participate in formulating criteria and in making the evaluations.
5. Cooperative vocational education programs should be evaluated in terms of student outcomes and on the effects of the program on local manpower conditions, as well as on program characteristics and operating practices.

Professional organizations, such as the American Vocational Association; accrediting associations, such as the National Society for Secondary School Evaluations; and State research coordination units have evaluative criteria which may be useful in formulating criteria for evaluating cooperative vocational education programs. When a program is being evaluated, those whose work is being appraised should be involved in determining the criteria to be used and in evaluation of the program. If they have a part in these activities, staff members are more likely to accept the evaluation and to strive for program improvement.

Formulating Evaluative Criteria

Programs are ultimately evaluated in terms of their effects on such factors as employment of graduates, student retention and drop-out rates, ratios of trained workers to available job openings, and job performance of those who received the training as compared to those who did not. Accrediting associations and other educators often evaluate programs on the basis of program characteristics and the extent to which recommended practices are followed. It is necessary to describe and measure program characteristics, as well as student outcomes, in order to determine what combination of these factors achieve the desired program objectives. Presumably, there is a relationship between the presence of certain characteristics and outcomes, even though research is needed to verify this relationship.

Evaluating Outcomes. The following types of information should be considered in evaluating cooperative vocational education outcomes:

1. Number of students served by the program and the percentage of those not enrolled who could benefit if enrolled.
2. Number and distribution of occupations for which cooperative vocational education is available.
3. Follow-up data after graduation at one, three and five-year intervals
    a. retention in same job
    b. employment in related jobs
    c. additional education and training taken or needed
    d. unemployment history
    e. income, advancements, job duties
4. Impact of the program on drop-out and youth unemployment rates
5. Comparisons of labor market needs and number being trained in specific occupational fields
6. Evaluations by employers of the job performance of graduates as compared to other groups
7. Objective data derived from experimental or quasi-experimental research. (e.g., specific practices achieve certain outcomes?)

Evaluating Program Characteristics. Even though there is a lack of conclusive evidence to show the relationship of all recommended program characteristics to program objectives, and particularly student outcomes, the recommendations are usually based on the experiences of many practitioners who were successful in operating programs and who followed certain practices. Usually the following kinds of information are considered in evaluating characteristics:

1. Organization;
    methods of determining need for program, use of advisory committees, provisions for coordination and related instruction, student admission practices, schedule and school credit arrangements, cooperation with other agencies and institutions
2. Nature of offerings;
    basis for course determinations, relevance to occupational competency, adequacy for student needs, correlation with other subjects
3. Physical facilities;
    space and structure, amount and variety of equipment, similarity to work environment and current practice in work world, adaptability to program needs
4. Instructional staff;
    occupational experience, general educational background, technical and professional preparation, competencies, professional development and affiliations with organizations

5. Instructional activities;
   evidence of planning, relevance to student needs and abilities and to occupational application, balance of practical and theoretical instruction, attention to attitude development
6. Instructional materials;
   currency, relevancy, variety, and accessibility, adequacy of reference and individual study materials
7. Methods of evaluation
   basis for evaluating students' performance, use of job performance criteria, use of follow-up studies, participation of employers and students in evaluation process.

The general characteristics listed are those which are felt to be important in evaluating all cooperative vocational education programs. Further steps must be taken in which the characteristics are described more specifically for certain types of programs and a set of standards agreed upon by those who conduct the evaluation.

PROVIDING FOR RESEARCH IN COOPERATIVE VOCATIONAL EDUCATION

Provisions for research activities in Part C of the 1968 Vocational Education Act apply to cooperative vocational education as a part of the total program. There are also special provisions for research in Part G of the Act that apply to programs supported by Part G funds. In general, the purposes of research are (1) evaluation, which leads to identification of problem areas in cooperative vocational education and justification for existing practices; and (2) organized change and the development of new methods and practices to achieve the desired outcomes. Whereas the 1968 legislation stated that cooperative vocational education should be extended to individuals who were not being served under the existing programs and expanded to include training for new and different occupational fields, it became obvious that research was needed to determine effective approaches in achieving these purposes. The impetus for getting research projects started in cooperative vocational education must come from personnel in the field who express the need for information available through research and who have ideas for program improvement.

Possible Areas of Investigation and Program Development

Participants at the National Conference on Research, held at Oklahoma State University, February 1969, suggested some critical areas for vocational education. These are listed below along with some specific areas related to cooperative vocational education.

1. The methodology of curriculum development
   a. What occupations should be taught through cooperative education?
   b. What competencies should be developed through related instruction? or clusters of competencies?
2. The formation of broad manpower policies
   a. What percentage of training needs can be met through cooperative education?

Research

1. Research is needed to improve effectiveness and efficiency of existing programs and to develop viable instruction for new occupations and additional groups of students.
2. Cooperative vocational education personnel must participate in identifying research needs and ideas for program improvement.
3. Part C of the 1968 Amendments provides for reimbursing States for research costs. Fifty per cent of the allotments to States are controlled by State boards and the remaining 50 per cent is disbursed by the U.S. Office of Education.
4. Research funds are available under Part G for research activities connected with cooperative vocational education programs funded under Part G.
5. Research coordination units in each State are available to advise local schools on research and development projects and to help in conducting projects for improvement of programs.

- b. What are the obligations of business and industry to provide occupational training?
- c. How can labor organizations contribute to programs?

3. The relative efficiency of various organizational structures
    - a. What types of organizational structures are most effective for cooperative vocational education?
    - b. What are the advantages of grouping by occupational fields or by student characteristics?
4. Building curricula for the disadvantaged
    - a. What related instruction is needed by selected groups of disadvantaged students?
    - b. What patterns of curriculum organization are most effective for certain groups of disadvantaged students?
5. Teacher education processes
    - a. What kinds of occupational experience provide best preparation for teacher-coordinators?
    - b. What technical preparation is needed? professional courses?
6. Student selection procedures and devices
    - a. Who benefits from cooperative vocational education?
    - b. When is a student ready for on-the-job experiences?
7. The development of an information system which will keep practicing teachers up to date
    - a. Production of individual study materials for specific occupations.
    - b. Dissemination of information on new and emerging occupations and relevant capabilities and competencies needed.

8. The indexing of staff and personnel throughout the State who are competent in research techniques
    a. Identification of personnel who know cooperative vocational education and are qualified for research work.
    b. To whom can teacher-coordinators go for assistance in research?
9. The extent of vocational education in the private sector
    a. What industries or businesses are participating in cooperative vocational education?
    b. What occupational competencies are being taught on the job?

These and other questions must be answered in the search for improved practices in cooperative vocational education. Research coordination units and professional research personnel in State agencies can provide services to facilitate research projects when practitioners make known their critical needs.

Sources of Research Funds

U.S. Office of Education. Part C of the 1968 Vocational Education Amendments contains provisions for reimbursing the States for research in vocational education. It also authorizes the United States Commissioner of Education to make grants and contracts with institutions of higher education, public and private agencies and institutions, State boards, and local schools for fifty percent of the sums available to each State. These funds may be used for purposes such as the following:

1. Research
2. Training programs to familiarize practitioners with research findings and results of effective pilot and demonstration projects
3. Experimental, developmental and pilot programs
4. Demonstration and dissemination projects
5. Development of new vocational education curricula
6. Projects in the development of new careers and occupations
    a. New careers in mental and physical health, crime prevention and correction, welfare, education, municipal services, child care and recreation
    b. Improved methods of involving public and private sectors in training
    c. Evaluation of programs for training, development and utilization of public service aides.

Local schools may apply for grants and contracts to conduct research for cooperative vocational education by submitting proposals to the U.S. Office of Education through their State boards.

State Boards for Vocational Education. The remaining 50 percent of the sums available to each State for research and training are set aside for distribution by State boards for vocational education and used for (1) costs of State research coordination units; (2) grants and contracts for projects recommended by the research coordination units and the State advisory councils. Local schools who wish to obtain this kind of research support should seek the advice and help of the State Research Coordination Unit. Priorities are likely to be given to projects which have implications for meeting the special vocational education needs of youths in economically depressed communities who are disadvantaged to the extent that they have not been able to succeed in or benefit from existing programs.

Additional funds are available through State boards for evaluation and program development as a part of ancillary services in Parts B and G of the Act. Research and evaluation activities connected with cooperative vocational education programs may be supported with Part G funds.

Formulating a Plan for Research in Cooperative Vocational Education

It is essential that States and local schools participate in research activity designed to improve cooperative vocational education. Local Plans, as well as State Plans, should contain provisions for the research and development deemed necessary by teacher-coordinators and other cooperative program personnel. Schools which do not have adequately trained research personnel should utilize the services of State research coordination units in formulating a plan for research, in the development of proposals, and in conducting projects. With research evidence teacher-coordinators have a sound basis for adopting unique methods, extending programs, and justifying expenditures.

SUMMARY

The 1968 Vocational Education Amendments make extensive provisions for maintaining and improving cooperative vocational education by authorizing funds to be used for ancillary services. Before there can be any substantial growth in the number of students served and new kinds of programs developed, additional personnel must be identified and trained. More supervision and leadership are needed to direct the kinds of comprehensive programs that are envisioned. In-service personnel must be trained for new responsibilities and program improvements, as well as to keep their teaching up to date with rapid changes in the world of work. Curriculum materials must be developed and made more readily available to provide better related instruction for students. More research and evaluation are needed to give direction to program planning and improvement of practices. In order to give students better occupational preparation, and to extend cooperative vocational education to more individuals, local schools, State boards and other agencies involved in program development must give primary considerations to ancillary services.

APPENDIX 1

SCHOOL ADMINISTRATOR'S CHECK LIST FOR ESTABLISHING A COOPERATIVE VOCATIONAL EDUCATION PROGRAM

A. Determine whether or not a program is needed and feasible.

1. Learn how the program operates, who is responsible for the organization and administration of the local program, and the responsibilities and functions of teacher-coordinators and related subject teachers.

2. Learn the State requirements for the operation of the program.

3. Request assistance in determining the need for a program from the Vocational Division of the State Department of Education.

4. Determine whether or not there will be sufficient interest in the program. Sources of data:
   a. Student Interest Survey
   b. Parents Interest Survey
   c. School Board Recommendations
   d. Guidance Personnel Recommendations
   e. Faculty Recommendations

5. Make a local occupational survey to determine the number and types of training stations available. Sources of assistance in gathering occupational need data:
   a. Advisory Committee
   b. Public Employment Service
   c. Comprehensive Area Manpower Planning Committee
   d. Chamber of Commerce
   e. U.S. Census Statistics
   f. Service Clubs
   g. Labor Groups
   h. Research Coordination Units
   i. Counselors
   j. Trade Associations
   k. State Department of Education
   l. Surveys Conducted as Student Class Projects

6. Determine whether the cooperative education program will fit into total school program answering the following questions:
   a. Are there sufficient physical facilities, room and equipment available?
   b. Can instructional materials be made available?
   c. Can the school meet the requirements of the State Plan for the program?
   d. Are instructional personnel available?

  - e. Is the school near enough to the employment community so that students can get to the training stations from school and home without undue difficulty?
  - f. How many students are now working?
  - g. What courses, if any, must be added for effective operation of the program?
  - h. Have key individuals among employer and employee organizations been contacted regarding the advisability of setting up the program? Has their cooperation for setting up the program been obtained?

B. If the program is needed and feasible, these steps may be taken to establish the program:

1. Install the program.
   - a. Decide upon the type or types of programs to be installed.
   - b. Devise a tentative written plan, including: philosophy, objectives, policy formation, control, procedures, responsibilities of personnel, organizational structure and general supervision, broad advisory functions, and an estimated total cost and budget for the program.
   - c. Describe characteristics of student groups to be served.
   - d. Identify occupations for which training will be given.
   - e. Provide space for the program, classrooms, etc.
   - f. Plan the appointment of an advisory committee. (The board of education may aid in the appointment of the advisory committee.)
   - g. Publicize continually progress in the development of the program.
   - h. Thoroughly inform the faculty of the school on the objectives of the program and how it operates.
   - i. Inform parents about the program.
   - j. Through the counseling services, identify students who would benefit from and be interested in the program.
2. Select and hire a teacher-coordinator.
   - a. Determine the number of part-time and/or full-time teacher-coordinators required.
   - b. Inform the teacher training institutions and the State Department of Education of the need for a coordinator (s).
   - c. Consider state requirements and essential personal characteristics when selecting a teacher-coordinator answering the following questions:
     - (1) Does the coordinator have the required professional and technical training for the particular program to be installed?
     - (2) Is the coordinator occupationally competent for this program? (Does he have actual work experience in the occupational field in which he will train students?)
     - (3) Does the coordinator have a deep interest in youth?
     - (4) Does the coordinator believe in the program and the need for it in the school and community?

(5) Will the coordinator be respected as a teacher and a faculty member by pupils and faculty?
(6) Will the coordinator be respected by members of the employment community?
(7) Will the coordinator be an active participant in school and community affairs?

APPENDIX 2

PRINCIPAL'S CHECK LIST FOR ESTABLISHING A COOPERATIVE VOCATIONAL EDUCATION PROGRAM

A. Activities Prior to Beginning Program

1. Become as familiar as possible with the program and its operation so that questions from parents, students, and employers can be answered.
2. Learn how the cooperative program fits into the overall curriculum of the school. Know its vocational objectives and how it operates.
3. Make arrangements for credit and hours.
4. Determine the availability of classroom facilities and equipment.
5. Designate the coordination and teaching personnel needed and determine their responsibilities.
6. Publicize the program within the school and in the community.
7. Participate in making a written local plan for the program.

B. Activities After Program is Initiated

1. Establish broad and immediate basic policies for the program.
2. Schedule related instruction
   a. Schedule or help to organize the vocational classes for the coordinator to teach. (The class schedule should permit pupils to obtain experiences in a training station in the morning or in the afternoon, or on alternate days or weeks.)
   b. Determine the coordinator's load, providing sufficient time in his daily schedule for supervising the student on the job. (A good guide to follow is one-half hour per student per week.)
   c. The class enrollment should be limited sufficiently to provide adequate time for individual instruction. (Fifteen to twenty-five students per class is a good guide to follow.)
3. Assure that the counselor(s) and coordinator(s) work together closely in the selection of students.
4. Provide an opportunity for the coordinator to present the program to the faculty.
5. Provide opportunities for the coordinator to present the program to prospective students.
6. Assist coordinator and counselor in selecting students who will benefit from the program. Consider the following:
   a. Interest in occupation for which training is available

   b. Readiness for occupational experience
   c. Acceptance by a training station. (This is the final test of a student's being acceptable.)

7. Encourage the coordinator to set up a coordination plan and know what his time schedule will be.
8. Provide a continuous budget for the program.
9. Help the coordinator acquire needed instructional materials, equipment, teaching aids, and supplies.
10. Determine whether or not the coordinator has a well organized course of study.
11. Check to see that each pupil receives school credit and full pay for on-the-job training.
12. Help the coordinator develop a plan for program evaluation and follow-up.

APPENDIX 3

COORDINATOR'S CHECK LIST FOR ESTABLISHING A COOPERATIVE VOCATIONAL EDUCATION PROGRAM

(Items in the approximate sequence in which they should be performed)

A. Before school begins.

1. Review planned budget and make recommendations for any needed revisions.
2. Organize the steering committee (temporary advisory committee) with representatives of employers and employees for the occupational field(s) and from the school, parents, and students.
3. Announce availability of the program and provide program information.
4. Interview and obtain information on potential students.
5. Identify students who are to be accepted for a cooperative vocational education program.
6. Describe expected student outcomes.
   a. Identify career goals and occupations.
   b. Specify needed competencies.
   c. Write statement of expected student outcomes.
7. Arrange for on-the-job training with employers.
   a. Select training stations (employers of students).
   b. Explain the program purposes, policies, and procedures.
   c. Obtain training agreements.
   d. Select and appoint training sponsors (on-the-job trainers).
   e. Orient training sponsors.
   f. Develop training plans.
8. Arrange placement of students.
   a. Match students with training stations where they are likely to succeed and find satisfaction in the work.
   b. Arrange job interviews.
   c. Prepare students for job interviews and successful entry.
   d. Check with employers on their decisions and follow up with individual conferences with students.
   e. Continue arranging interviews until all students are placed.
9. Plan job-related instruction.
10. Order instructional materials.

B. After School Begins.

1. Make initial coordination calls as soon as possible in order to avoid problems and to assure a successful beginning for students and training sponsors.
2. Make final lesson plans and arrange for individual study and interrelated instruction.
3. Help students organize a vocational youth organization chapter and plan chapter activities.
4. Organize a permanent advisory committee for specific occupational fields.
    a. Have appointment and announcement made by school administration.
    b. Describe duties of the committee.
    c. Schedule meetings.

APPENDIX 4

COORDINATOR'S CHECK LIST OF RECOMMENDED PRACTICES FOR COOPERATIVE VOCATIONAL EDUCATION PROGRAMS

A. Students

1. Students are placed in jobs matched to their abilities and interests and in which they are likely to be satisfactory and satisfied. The students meet the requirements of labor laws.
2. A system of admitting students to the program has been developed jointly with the guidance staff, administration and participating employers.
3. Programming procedures have been worked out with the approval of counselors and the administrator.
4. A method of granting credit and grading has been adopted.
5. Students receive full pay for on-the-job training time.
6. Students are placed in work environments which are healthful and where safety standards are maintained.

B. Public Relations

1. The faculty and administration have been oriented.
2. The student population and their parents are informed about the program.
3. Procedures of the program have been developed in cooperation with school, community, labor and employer groups.
4. A planned program of spaced publicity has been made.
5. Concerned groups in the community have been informed about the program.
6. Potential employers have been contacted and asked to participate.

C. Coordination.

1. The teacher-coordinator has coordination time allotted. (approximately one half hour per week per student on the program).
2. Each student works and learns under the direction of a training sponsor throughout the time he is in the program.
3. A training agreement and on-the-job training plan has been arranged between the coordinator, each training sponsor and student, and his parents.
4. The coordinator has a system of reporting to the administrators, counselors, and other faculty to keep them posted on the program.

5. The coordinator has a system for evaluating occupational experience and job performance.
6. Coordination calls are made to each training station approximately once every two weeks.
7. The coordinator implements a plan for developing training sponsors.

D. Training Program

1. The program prepares students for occupations which offer career opportunities and are "susceptible to advancement."
2. Provisions are made to keep the training up to date and in line with occupational changes.
3. A written statement of program purposes has been prepared and disseminated so that concerned individuals and groups understand the purposes of the program.
4. Long-range goals for groups to be served have been established and priorities have been set.
5. Student and manpower needs are considered in the design of the program and in its long-range development.
6. Provisions are made for periodic and continuous evaluation of student outcomes and effects of the program on manpower and the community.
7. The policies and procedures established by the State Board of Vocational Education are followed.
8. A vocational youth organization chapter is an integral part of the instructional program.

E. Related Instruction

1. Provision has been made for school instruction related to the occupational experiences and career objectives of the students.
2. The competencies taught in school are correlated with the occupational field for which on-the-job training is given.
3. Provision is made for adequate facilities and equipment, appropriate for the occupations to be taught and the needs of the students.
4. Job-related instructional materials are provided.
5. The methods of instruction and learning activities are designed to develop occupational competencies.

6. Students are prepared for occupational flexibility by learning how to learn a job effectively and efficiently because they are made aware of the process; and methods of learning are used that carry over into the learning of future jobs.
7. Students learn to accept responsibility for their own progress in learning a job and planning a career.

DISCRIMINATION PROHIBITED – Title VI of the Civil Rights Act of 1964 states:

> "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal Financial assistance."

Therefore the *Guide for Cooperative Vocational Education,* like every program or activity receiving financial assistance from the Department of Health, Education, and Welfare, was prepared in compliance with this law.